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Bryan Station High School Administration & School Counseling

Administrative Office - (859) 381-3308

Eric Hale, Principal, The Academies of Bryan Station Jay Bordas, Behavior Specialist Dion Sanders, Administrative Dean Eric Neely, Academy Coach Fred Snodgrass, Freshman Principal Lindsay Arnold, Freshman Principal Kendall Kearns, Engineering and Robotics Academy Principal, StationARTS Rebecca Shearer, Information Technology Academy Principal Meredith Ramage, Leadership Academy Principal Jami Dailey, Medical Science Academy Principal

Student Support Staff

Brandy Ashford, College and Career Coach Annie Belding, Leadership Academy School Counselor Laurel Viera, Information Technology Academy School Counselor Beth Gooch, Engineering and Robotics Academy, StationARTS School Counselor Brandi Ogden, Medical Academy School Counselor Yvette Thompson, Freshman School Counselor A-I Anovia Byars, Freshman School Counselor for J-Z

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Graduation Requirements & Grades

Graduation Requirements

SUBJECT	# OF CREDITS	COURSES
English / Language Arts	4	English 1 and 2 and two English credits aligned with the ILP.
Mathematics	4	Algebra 1 and Geometry and two math credits aligned with the ILP. *Algebra 2 is required by most colleges.*
Science	3	Integrated Science, Biology, and Physical Science or Chemistry/ Physics (at least 1 aligned with the ILP)
Social Studies	3	U.S. History, World Civilization/History, and either Int. Social Studies or Government (at least 1 aligned with the ILP)
Health	0.5	
Physical Education	0.5	1 credit in JROTC may substitute for PE
Humanities/Visual and Performing Arts	1	 -VPA course <u>OR</u> -Successful completion of 2 credits from the following areas: dance, drama, music, art) <u>OR</u> 2 credits from the following: Graphic Arts Creative Writing Broadcasting Global Issues in Media Journalism Yearbook STLP Psychology Criminal Justice Culinary Arts World Mythology AP Seminar
World Languages	0	Recommended for Pre-College Curriculum but not grad requirement.
Electives	10	At least 6 credits aligned with the Career

		Academy
Total credits required for graduation	26	

In addition, students must complete one of eight graduation qualifiers listed in 704 KAR 3:305, demonstrate performance based competency in technology, and pass a Civics test. Students must earn an Apprentice score in reading and mathematics in state assessments, complete a course or program in financial literacy, receive instruction in workplace skills and complete annual ILP.

Additional information is available on the KDE website:

<u>https://education.ky.gov/curriculum/hsgradreq/Pages/default.aspx</u>

KENTUCKY PRE-COLLEGE CURRICULUM (PCC)

Four-year colleges and universities expect high school graduates to meet the pre-college curriculum. BSHS students can meet the PCC by completing graduation requirements and demonstrating competency in the second year of a World Language. In addition, at least five of the eleven electives should be "rigorous." *Rigorous* electives should have academic content at least as challenging as courses required in the minimum high school graduation requirements. These electives should be in social studies, science, math, English language arts, visual and performing arts, world languages, and above the introductory level in agriculture, industrial technology, business, marketing, family and consumer sciences, health sciences, and technology education.

ACADEMIC GRADE REPORTING

High schools operate on a semester system (18 weeks), and students will receive progress reports every four weeks. Students will receive final report cards, which include G.P.A. (Grade Point Average), at the end of each semester.

Grading Scale A = 4 B = 3 C = 2F = .1 or 0

OPPORTUNITY MIDDLE COLLEGE

Opportunity Middle College is a partnership between Fayette County Public Schools and Bluegrass Community Technical College (BCTC). Students have the opportunity to enroll in both college and high school courses taught at the Leestown campus of BCTC, and can earn both high school and college credit for these courses. There is no cost for tuition or books for classes taken in this program for students receiving free/reduced meals. Full pay students will pay approximately \$200 per college course and pay for their own textbooks. Students who will be a junior or senior next fall are eligible to apply. Students must have a 2.5 GPA and submit PLAN or ACT scores along with a high school transcript to verify that they can successfully complete the compacted and rigorous early college curriculum. Low socio-economic and first-generation college students receive priority in the selection process. Please see your high school courselor for an application and/or more information.

CREDIT REQUIREMENT FOR GRADE PROMOTION

To be promoted to: Required completion of:

Freshman 8th grade (or equivalent as determined by middle school)

Sophomore	6 credits
Junior	12 credits
Senior	18 credits
Graduation	26 credits in specific areas

KENTUCKY EDUCATIONAL EXCELLENCE SCHOLARSHIP

(KEES)

Kentucky high school students have a great opportunity to make their education pay with the Kentucky Educational Excellence Scholarship (KEES). KEES is administered by the Kentucky Higher Education Assistance Authority (KHEAA). The better students do in high school; the more money they will earn toward college scholarships. Students who continue to make good grades in college can retain their scholarships. Education really does pay! For more information go online to: www.kheaa.com

THE ACADEMIES AT BRYAN STATION

In an ever-changing world, it is hard to know exactly how to prepare for the road after high school. At the Academies of Bryan Station High School, our academy education approach helps students discover what they're passionate about and see the purpose of what they're learning in the classroom- ultimately helping them graduate ready for whatever their future has in store! Academies allow students to follow their interests, talents, and curiosity. Small learning communities grouped around common themes give students the space and structure to explore everything the world has to offer.

The Academy of Engineering, Manufacturing, & Robotics

The Engineering, Manufacturing, & Robotics Academy at Bryan Station High School will introduce students to careers in Science, Technology, Engineering, and Math (STEM) related fields. Students will also learn the necessary employability skills to be successful in the workplace. Students will have the opportunity to become career ready through the Kentucky Occupational Skill Standards Assessment (KOSSA) and industry certifications. Students will also have the opportunity to receive articulated college credit for select courses through Bluegrass Community & Technical College. Students will be engaged with rigorous, real world, project based curriculum that mirrors skills required in STEM careers. Students who are senior completers in the pathways will also have the opportunity to apply for cooperative and internship work experiences.



Engineering, Manufacturing, Robotics Pathways

Engineering, Manufacturing, and Robotics Careers:

Mechanical Engineering Technician, Industrial Engineer, Aerospace Engineer, Automotive Engineer, HVAC Engineer, Electrical Engineer, Drafter, Mining Engineer, Biomedical Engineer, Chemical Engineer, Civil Engineer

The Academy of Information Technology

The Academy of Information Technology is the longest established career academy at BSHS. This small learning community is for students who have an interest in Information Technology—the fastest growing employment opportunity in the nation. The courses offer a wide range of computer science skills with an emphasis on 21st century success skills. This learning environment will encourage students to become leaders in the areas of information technology through project and work based learning experiences in the classroom and through job shadowing, internships, guest speakers, field trips, mentors, and special student-led community projects. The three major pathways offered in the IT Academy are: computer programming, cinematography & video production, and graphic design. Student leadership organizations include Student Technology Leadership Program (STLP), Gaming Club, Technology Student Association (TSA) and E-Sports. This academy also has an established dual credit partnership with BCTC and NKU to provide the opportunity to earn up to 12 credits in a university Informatics program.

Information Technology Pathways



Information Technology Careers:

Computer Programmer, Software/Hardware Engineer, Cyber Security Engineer, Game Designer, Web Developer, Computer Animator, Logistics Coordinator, Film Editor, Videographer, Photographer, Photojournalist, Graphic Designer, Broadcast Technician.

The Academy of Leadership and Professional Services

The Academy of Leadership and Professional Services is designed to expose students to careers in financial services, hospitality and education. The Academy will be a small learning community with courses designed to connect students to Central Kentucky's top leaders, entrepreneurs and educators; stimulate their imaginations, and prepare them for a successful future as part of America's free enterprise system and education system. There are three majors within the Academy:

• The Culinary & Food Service pathway addresses a skill set necessary for success in the culinary

industry. The courses in this pathway will help students develop skills in early career ladder positions and promote continuing education at the post- secondary level preparing for careers associated with restaurants, institutional food service, and hospitality and catering, as well as food and beverage operations. Possible careers include Executive Chef, Sous Chef, Pastry Chef, Entrepreneur, Food Inspector and Butcher.

• The *Teaching & Learning* pathway focuses on the general theory and practice of learning and teaching, the basic principles of educational psychology, the art of teaching, the planning and administration of educational activities, school safety and health issues, and the social foundations of education. Possible careers include Teacher, Administrator, Counselor, Instructional Coach, Curriculum Specialist, Curriculum Writer/Consultant, School Psychologist, Curator, Professor, Policy Advisor, Tutor and Assessment Specialist.

• The *Management & Entrepreneurship* pathway generally prepares individuals to plan, organize, direct, and control the functions and processes of a firm or organization. Includes instruction in management theory, human resources management and behavior, accounting and other quantitative methods, purchasing and logistics, organization and production, marketing, and business decision-making. Possible careers include Association Manager, Bed and Breakfast Proprietor, Entrepreneur, Event Planner, Hotel Manager, Insurance Agent, Insurance Claims Adjuster, Property Manager, and Volunteer Manager.



Leadership & Professional Services Careers:

Teacher, Counselor, Media Specialist, Executive Chef, Purchasing Manager, Resort Manager, Pastry Chef, Sales, Customer Service, Advertiser, Entrepreneur.

The Academy of Medical Sciences

The Academy of Medical Sciences is designed to expose students to occupations within healthcare industry. Completion of the academy will require students to the demonstrate proper workplace skills, knowledge of medical terminology, healthcare ethics, and procedures of the healthcare industry. Students will be required to certify in safety, first aid, and CPR, as required by the American Heart Association. Upon successful completion of the foundation medical courses, students will have the opportunity to certify in the pathway of their choice. Students who have met the expectations of the program may become certified as a State Registered Nursing Assistant or Pharmacy Technician or certify in Allied Health. Students who demonstrate acceptable academic and behavioral achievement will have the opportunity to complete clinical site work, job shadowing, and potential cooperative placement in the health fields. Through the academy experience, students will also receive mentoring and encouragement from the local healthcare business and industry. Students also have the opportunity to join Health Occupation Skills of America (HOSA), which will help provide the student with leadership opportunities in feeder middle and elementary schools, Bryan Station High School, and the community.



Medical Careers:

Nursing Aide, Caregiver, Resident Care Associate, Patient Care Technician, Phlebotomist, Dental Assistant, Medical Clerk/Admitting/Reception, Laboratory Technician, Dietitian, MRI Technologist, Pharmacy Technician

The Freshman Academy

The Freshman Academy consists of a team of teachers collaborating across content areas to serve our freshman students. This small learning community draws on the concept of team teaching and interdisciplinary study in order to fully support the students, academically and otherwise. All first-year students at The Academies of Bryan Station High School are enrolled in English/language arts, math, science, and Freshman Seminar—a year long, exploratory course designed to introduce the career academy concept. Students requiring additional support in English/language arts and/or math may be enrolled in classes to help them develop these important foundational skills. Over the course of the year, students will work on problem-based learning assignments and projects across content areas. Additionally, students will experience a series of hallmark ceremonies beginning with the Commitment to Graduation ceremony in the fall and ending with an all-day field trip to a local university during the spring semester. At The Academies of Bryan Station High School, the Freshman Academy focuses on being passionate, being engaged and being the best version of ourselves.

Bryan Station High School Programs AFJROTC Program

The AFJROTC program is a 4-year program for high school students. Each year is divided into three categories: academics, leadership and wellness. Academic studies include history, science, space, and optional studies. Leadership studies include Air Force customs and courtesies, cadet corps activities, study habits, time management, communication skills, and leadership and management studies. Wellness is an all inclusive weekly physical fitness program.

StationArts Program (StARTS)

StationArts is a special four-year academic program housed at The Academies of Bryan Station High School focusing on music, theatre, and visual art. The mission of StationArts is to foster, advance, and mentor a community of students who will innovate, create, perform, and continue their education and lifelong participation in the arts. StationArts students are immersed in artistic experiences from daily classes in their preferred arts area to working with professionals both within BSHS and beyond its doors. Through a rigorous and complete fine arts curriculum, StationArts services our gifted and talented arts students, while striving to prepare every student to continue their education and lifelong participation in the arts.

Dual Language Immersion (Formerly SIP)

The Dual Language Immersion Program is a K-12 program that provides a unique and challenging high school curriculum that furthers Spanish proficiency while offering rigorous courses necessary for college preparation. In this program, courses in science, humanities and Spanish language are provided in Spanish by native speakers. The Spanish Immersion coursework can lead to an International Spanish Academy diploma awarded by the Embassy of Spain and to the Fayette County Public Schools Seal of Biliteracy.

BSHS COURSE DESCRIPTIONS

The course descriptions are written to clarify course content and to assist students, counselors, and teachers with the appropriate placement in classes. It should be noted that some descriptions cover the entire school year, while others are based on one semester.

ENGLISH LANGUAGE ARTS DEPARTMENT

English Core Classes

	Program of Studies A ¹	Program of Studies B ²	Program of Studies C ³
8th Grade (courses taken at the middle school)			Advanced English 1 - must earn an A or B for credit in the course
9th Grade (Freshman Academy, including special programs)	English 1	Advanced English 1	Advanced English 2 or AP Seminar - Requirements: 85th percentile in MAP and a 3.8 GPA
10th Grade (all career academies and special programs)	English 2 or Advanced English 2	AP Seminar	AP Seminar or AP English Language and Composition (AP Seminar must be taken first)
11th Grade (all career academies and special programs)	English 3 or Advanced English 3	AP English Language and Compositio n	AP English Language and Composition or AP English Literature (AP English Language must be taken first)
12th Grade (all career academies and special programs)	English 4	Dual Credit English - ENG 101 FALL SEM	Dual Credit English - ENG 101 FALL SEM ENG 102 SPRING SEM

¹ Program of Studies A enables a student to complete Kentucky's English language arts requirements for graduation and will prepare a student to begin a career or enter post-secondary school following high school.

² Program of Studies B enables a student to complete Kentucky's English language arts requirements for graduation with a more rigorous curriculum and additional opportunities to earn college credit while still in high school. Students will receive weighted grades for these courses. Please note: The Academies of Bryan Station High School encourages student choice and open enrollment in advanced-level courses.

³ This program of study is for students who begin high school courses in middle school. This program of Studies C enables a student to complete Kentucky's English language arts requirements for graduation with a more rigorous curriculum and additional opportunities to earn college credit while still in high school. Students will receive weighted grades for these courses. Please note: The Academies of Bryan Station High School encourages student choice and open enrollment in advanced-level courses.

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Credit: 1 AP

	ENG 102 SPRING SEM Or AP English Literature & AP Research	or AP Research (AP English Literature must be taken first)
	Research	

ENGLISH 1 (9)

Exploration of Career and College Literacy: This course introduces students to secondary-level composition, close reading of informational and literary texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage) through the lens of exploring future careers and post-secondary education.

ADVANCED ENGLISH 1 (9)

Advanced Exploration of Career and College Literacy: This course introduces students to secondary level composition, close reading of informational and literary texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage) through the lens of exploring future careers and post-secondary education. As an accelerated class, this course requires grade-level (or better) competence in literacy skills and higher-order critical and abstract thinking.

ENGLISH 2 (10)

Career and College English Literature and Composition: This course continues a focus on composition, close reading of literary texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage) through the lens of the student's selected career academy. *The course also offers preparation for Kentucky's English language arts end of course exam and writing assessment.*

ADVANCED ENGLISH 2:

Advanced English 2 is a sophomore-level English class for freshmen who passed Advanced English 1 in middle school with an A or B or sophomores who have not taken an advanced class and want to take AP in the next calendar year. In Advanced English 2, students will engage in careful, deliberative readings of complex texts and engaging topics. This course will provide students with intentional opportunities to demonstrate mastery in the skills of reading, communicating, and writing composition. Students will gain skills that will extend beyond the classroom and prepare them for their AP English course.

ADVANCED AP SEMINAR (10)

If you took HS English in 8th grade, you must have a 3.8% GPA and 85th percentile in reading.

Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts, and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. College credit is earned with a qualifying score on an AP exam.

Credit: 1

Credit: 1

ENGLISH 3 (11th grade)

Career and College English Language and Composition: This course continues a focus on composition, close reading of informational texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage) through the lens of the student's selected career academy. The course also offers preparation for Kentucky's writing assessment and national college-readiness assessments.

ADVANCED ENGLISH 3

Advanced English 3 serves as a preparation course for Dual Credit English and is for students who have not taken an AP English course. The course will focus on effective writing and critical reading and building these skills to allow students to qualify, excel, and earn six hours of college credit in the Senior Dual Credit English Course during the next academic year.

AP ENGLISH LANGUAGE AND COMPOSITION (11/12)

course aligns with a college-level rhetoric and composition class, and focuses on analytical and argumentative composition, critical reading of informational/argumentative texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage). The course also offers preparation for Kentucky's writing assessment and national college readiness assessments in addition to the College Board's Advanced Placement English Language and Composition exam (whereas a qualifying score may result in college credit earned).

ENGLISH 4 (12th grade)

Career and College Capstone in Literacy: This course continues a focus on composition, close reading of literary and informational texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage) through the lens of the student's selected career academy. Students will complete a research-based composition, interdisciplinary project, and professional presentation focused on a topic of student choice connected to the student's career pathway/major/academy.

AP ENGLISH LITERATURE AND COMPOSITION (12th grade)

This course aligns with a college-level literary analysis class, and focuses on analytical and interpretive composition, critical reading of literary texts, the practice of speaking and listening, and the study of language (including vocabulary, grammar, mechanics, and usage).

The course also offers preparation for Kentucky's English language arts end of course exam and writing assessment, in addition to the College Board's Advanced Placement English Literature and Composition exam (whereas a qualifying score may result in college credit earned).

DUAL CREDIT ENGLISH (12)

Prerequisite: An English ACT score of 18 or above and a cumulative unweighted GPA of 3.0.

This course equates with a college-level rhetoric and composition class, and focuses on academic composition; critical reading of literary, informational, and argumentative texts; the practice of speaking and listening; and the study of language (including vocabulary, grammar, mechanics, and usage). Students will complete a research-based composition, interdisciplinary project, and professional presentation focused on a topic of student choice connected to the student's career pathway/major/academy. The course also offers college credit at the community college/state University level upon successful completion of the class.

English Electives

FILM STUDIES

The course focuses on teaching movies as visual narratives, but students analyze and study all of the aspects of film (e.g. photography, editing, sound, acting, story, writing, ideology, etc.). The course is both a film history course and a genre study course. Students will study important film techniques as well as the conventions of a genre, as well as critically view film as a literary work with respect to

Credit: 1

Credit: 1

Credit: 1

Credit: 1 This

authorship, setting, character, plot, theme, symbolism, and cultural significance. Students will regularly participate in listening, speaking, and writing activities.

JOURNALISM 1

Content for this course may vary. Possible topics may include: information gathering, writing, editing/proofreading, layout and production in print, digital and online formats.

ADV JOURNALISM 2 Pre Req, Journalism 1.

WORLD MYTHOLOGY (9-12)

This course will review world mythology and its influence on civilization as evidenced through numerous allusions. Composition will include analysis, comparison, and explication.

CREATIVE WRITING (9-12)

Content for this course may vary but will provide students an opportunity to analyze and create works such as short stories, one-act plays, poetry and/or personal, expressive pieces.

AP RESEARCH

Prerequisite: AP Seminar

AP Research is an interdisciplinary course that encourages students to demonstrate critical thinking and academic research skills on a topic of the student's choosing. This course builds on what students learned in AP Seminar to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students will design, plan, and conduct a year-long research based investigation to address a research question.

MATHEMATICS DEPARTMENT

Mathematics Core Classes

ALGEBRA 1 (9-12)

Algebra 1 is designed for students who are proficient in basic mathematics and have mastered pre algebra skills. The objective of Algebra 1 is to develop skills in algebraic manipulation and to give students an understanding of algebra by emphasizing concepts, structure, and applications. Students are expected to earn a grade of "C" or better before subsequently enrolling in Geometry.

GEOMETRY (10-12)

Prerequisite: Algebra 1

In Geometry, emphasis is placed on discovery, proof, and realistic applications of geometric relationships and principles. Topics will include constructions, inductive and deductive reasoning, points, lines, planes, angles, triangles, planar figures, similarity and congruence, circles, geometric solids, area, volume, locus, coordinate geometry, and transformation.

ADVANCED GEOMETRY (9)

This freshman course is designed for accelerated students with a high degree of proficiency in abstract mathematical ideas. Freshmen must receive a passing score on

the FCPS Common Assessment through enVision to take this class. Advanced Geometry will include the skills and concepts of Geometry but will differ in the approach to and rigor of formal proof. Sophomores may be approved for this class by earning an A in Algebra 1 and obtaining a teacher recommendation.

ALGEBRA 2 (10-12)

Prerequisite: Algebra 1 and Geometry

In addition to expanding on the mathematical concepts of Algebra 1 and Geometry, emphasis will be placed on preparation for study of higher mathematics: abstract thinking skills, the function

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

14

15

concept, and the algebraic solution of problems in various content areas.

ADVANCED ALGEBRA 2 (9,10)

Prerequisites: Algebra 1 and Advanced Geometry

This course is designed for accelerated students with a high degree of proficiency in abstract mathematical ideas. This course includes skills and concepts of regular Algebra 2, but the topics are covered in greater depth and with an emphasis on cooperative learning and less teacher lecture. Enrolled students will be expected to earn at least a "B" on all coursework. Juniors may be approved for this course by earning a grade of A in both Algebra 1 and Advanced Geometry and obtaining a teacher recommendation. Students may also "double up" and take along with Advanced Geometry upon teacher recommendation.

PERSONAL FINANCE (MATH CREDIT) (12)

Credit: 1 This course DOES NOT count towards the math requirement for NCAA Learning to make sound financial decisions is one of the most important lessons a student can learn. In this course, students will learn financial decision-making skills using real-life applications and data. The primary content for the course focuses on learning the ideas, concepts, knowledge, and skills that will enable students to implement beneficial personal decision-making choices; to become wise, successful, and knowledgeable consumers, savers, investors, users of credit and money managers; and to be participating members of a global workforce and society.

PROBABILITY AND STATISTICS (11,12)

Prerequisites: concurrently enrolled in or successfully completed Algebra 2

This course extends the study of probability and statistics learned in core classes. The topics for this course are probability; binomial and normal distributions; statistics including collecting, representing, and analyzing data; and inferential statistics. Enrolled students will be expected to earn at least a "C" in all coursework

ADVANCED PRE-CALCULUS (10-12)

Prerequisites: Advanced Geometry and Advanced Algebra 2

This course is intended for students who plan to take a regular calculus course in high school or college. The course covers topics traditionally taught in trigonometry and analytic geometry plus additional functions, e.g., circular, polynomial, absolute value, and natural number (sequences and series). Students intending to enroll in this course should have earned at least a "B" in all prior mathematics courses.

AP STATISTICS (Advanced Placement) (11, 12)

Prerequisite: Adv Algebra 2, teacher recommendation (w/A in Algebra 2), or Pre-Calculus The Advanced Placement Statistics course will include the study of distributions, relations in categorical data, random variables, use and abuse of tests and inference for linear regression. Enrolled students will be expected to earn at least a "B" on all coursework. Students intending to enroll in this course should have at least a "B" in all prior mathematics courses.

AP COMPUTER SCIENCE PRINCIPLES (11-12, and 10 w/approval of teacher) Credit: 1

The AP Computer Science Principles course is designed to be equivalent to a first semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course is unique in its focus on fostering student creativity. Students are encouraged to apply creative processes when developing computational artifacts and to think creatively while using computer software and other technology to explore questions that interest them. They will also develop effective communication and collaboration skills, working individually and collaboratively to solve problems, and discussing and writing about the importance of these problems and the impacts to their community, society, and the world.

Credit: 1

Credit: 1

Credit: 1

AP COMPUTER SCIENCE A / JAVA (11-12, and 10 w/approval of teacher) RECOMMENDED FOR IT PROGRAMMING STUDENTS

This course introduces students to fundamental programming concepts using the Java programming language. Topics include data types, control structures, simple data structures, error handling, object oriented programming, graphical user interfaces, and modular programming.

DUAL CREDIT MATH (11,12)

Prerequisites: two years of high school algebra and a Math ACT score of 22 and a 3.2 unweighted GPA

Course topics will include field and order axioms, equations, inequalities, relations and functions, exponentials, roots, logarithms, and sequences. A combination of lecture and mathematics software is used to go beyond high school algebra.

AP CALCULUS 1 AND 2 (Advanced Placement) (11, 12) Credit: 1 Prerequisite: Pre-Calculus OR Dual Credit MAT 155

These are Advanced Placement courses covering the material usually taught in differential and integral calculus. Students who complete the course may: 1) take the Advanced Placement exam in calculus, or 2) take the University of Kentucky by-pass exam if they are also interested in earning college credit. Enrolled students will be expected to earn at least a "B" on all coursework. Students intending to enroll in this course should have at least a "B" in all prior mathematics courses.

SCIENCE DEPARTMENT

Science Core Classes

INTRO TO CHEMISTRY EARTH & SPACE (10-11) (Adv & General) Credit: 1 Lab included. Students in this course develop an understanding of key concepts that help them make sense of life. While the included Performance Expectations (PEs) couple particular practices with specific Disciplinary Core Ideas (DCIs), instructional decisions should include use of many practices underlying the Performance Expectations. The PEs in this course are based on those described in A Framework for K-12 Science Education (NRC, 2012) and are structured into five bundles of study: (1) Energy Transformation (2) Energy Transfer (3) Regulation (4) Diversity and (5) Change.

INTRO TO BIOLOGY EARTH & SPACE (9-11) (Adv & General) Credit: 1 Lab included. Students in this course develop an understanding of key concepts that help them make sense of life. While the included Performance Expectations (PEs) couple particular practices with specific Disciplinary Core Ideas (DCIs), instructional decisions should include use of many practices underlying the Performance Expectations. The PEs in this course are based on those described in A Framework for K-12 Science Education (NRC, 2012) and are structured into five bundles of study: (1) Energy Transformation (2) Energy Transfer (3) Regulation (4) Diversity and (5) Change

INTRO TO PHYSICS WITH EARTH & Space (9-11) (Adv & General) Credit: 1 Lab included. Students develop a conceptual understanding of physics and Earth/space science content, as outlined in the Kentucky Academic Standards for Science, through the use of the science and engineering practices. They experience physics and Earth/space science concepts such as motions and forces, conservation of energy and the increase in disorder, interactions of energy and matter, and energy in the Earth system. Students will learn these core ideas through the use of the science and engineering practices and

crosscutting concepts. The science and engineering practices are skills students will use as they investigate the natural world and develop solutions to problems. The crosscutting concepts are conceptual ways of thinking that cross the domains of science. For this course, the suggested sequence is Introductory Physics with Earth/Space Science, Introductory Chemistry with Earth/Space Science, and Introductory Biology with Earth/Space Science.

Science Electives

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (AP) (10-12) Credit: 1 Prerequisite: Advanced Biology

This course is designed to be the equivalent of an introductory college course in environmental science. Students develop a conceptual understanding of Earth/space science through the use of scientific inquiry. The focus is on earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution and global change. A scientific inquiry approach uses concrete, hands-on experiences that require students to apply critical thinking skills.

ASTRONOMY (8-10)

This course will study the following topics during the fall semester: planets, moons, comets, asteroids, history of astronomy and space exploration, solar system formation, and the sun. This course will study the following topics during the spring semester: stellar structure, stellar evolution (including star formation, supernovas, and black holes), star clusters, galaxies, galaxy formation, the big bang, dark matter, dark energy, and modern observational astronomy methods.

ADV ASTRONOMY

Prerequisite: Passing grade or current enrollment in Chemistry required; a passing grade or current enrollment in Algebra 2 recommended

MICROBIOLOGY/FORENSICS (10-12)

Prerequisite: Biology Credit

A laboratory-based course that includes basic applications of the biological, physical, chemical, medical, and behavioral sciences. Students will investigate cellular function by studying cell structures, infectious diseases, as well as beneficial human-microbe relationships during the first semester. Second semester will be a study of the basic principles and uses of crime scene analysis and techniques. Students will be required to pay a lab fee for the test kits and materials needed to perform the different labs.

AP BIOLOGY (Advanced Placement) (11, 12)

Prerequisites: Adv Biology, Adv Chemistry*, and Algebra 2* (*can be taken concurrently) This is an intense, laboratory-based, college-preparatory life science course that focuses on eight major themes including the following: science as a process (scientific method), evolution, energy transfer and biochemical activity, continuity and change, the relationship between structure and function, regulation (cellular organism and ecological), interdependence in nature, and scientific advancement and society.

AP CHEMISTRY (Advanced Placement) (11, 12)

Prerequisites: Minimum B avg. in Advanced Chemistry, be currently enrolled in either Pre Calculus or Calculus, and current science teacher's signature

This is a standardized program of study that provides an overview of freshman college general chemistry. Topics include stoichiometry, acid-base equilibrium, kinetics, thermodynamics, atomic theory, organic chemistry, behavior of gases, and descriptive and solution chemistry. Twenty-two college-level labs are included in this course.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

AP PHYSICS 1 (Advanced Placement) (11 or 12)

Credit: 1 Prerequisite: Advanced Physics or teacher recommendation

This course includes topics in both classical and modern physics. These topics include: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. The basic ideas of calculus are introduced in connection with physical concepts, such as acceleration and work. Understanding of the basic principles involved and the ability to apply these principles in the solution of problems is the major goal of the course. Consequently, the course utilizes guided inquiry and student-centered learning to foster the development of critical thinking skills. (This course could be offered online if not enough students request the course.)

HUMAN ANATOMY AND PHYSIOLOGY (10-12) (Advanced & General) Credit: 1 This course provides an in-depth study of the anatomical and physiological functioning of human body systems from the cellular level to the organism level (examples may include, but are not limited to, the skeletal system, muscular system, respiratory system, nervous system, circulatory system, cellular metabolism, etc.). This course may include dissection as a course requirement. Students who may suffer from allergies to animals such as cats or rabbits, or have allergic reactions to latex, should consult with the instructor prior to enrollment.

SOCIAL STUDIES DEPARTMENT

50	ocial Studies Core Classes			
		Program of Studies A ¹	Program of Studies B ²	
	9th Grade	N/A	Advanced Placement (AP) Human Geography	
	10th Grade	World Civilizations	Advanced Placement (AP) World History	
	11th Grade	United States History	Advanced Placement (AP) US History	
	12th Grade	Integrated Social Studies	Advanced Placement (AP) US Government	

¹Program of Studies A enables a student to complete Kentucky's requirements for graduation and will prepare a student to begin a career or enter post-secondary school following high school.

²Program of Studies B enables a student to complete Kentucky's requirements for graduation with a more rigorous curriculum and additional opportunities to earn college credit while still in high school. Students will receive weighted grades for these courses. Please note: The Academies of Bryan Station High School encourages student choice and open enrollment in advanced-level courses.

WORLD CIVILIZATIONS (10)

World Civilizations is a survey course that focuses primarily on the historical, geographic, economic, governmental and cultural development of major civilizations after 1500, with a focus on the impact of the past on today's world. The first semester covers the period from the Renaissance to the French Revolution, and the second semester covers the period from the French Revolution to the present.

AP WORLD HISTORY (10)

AP World History focuses on developing students' understanding of world history from approximately 1200 C.E. to the present. The course has students investigate the content of world history for significant events, individuals, developments, and processes in multiple historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction

Credit: 1

Credit: 1

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between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures) that students explore throughout the course in order to make connections among historical developments in different times and places encompassing the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania. This course may require a summer assignment to be completed prior to the first day of school. *The course also offers preparation for Kentucky's writing assessment and national college-readiness assessments in addition to the College Board's Advanced Placement World History exam (whereas a qualifying score may result in college credit earned).*

AP UNITED STATES HISTORY (11)

APUSH focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of student abilities to think conceptually about United States history from approximately 1491 to the present. Seven themes of equal importance (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society) provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of United States history to teach topics of their choice in depth. This course may require a summer assignment to be completed prior to the first day of school. *The course also offers preparation for Kentucky's writing assessment and national college-readiness assessments in addition to the College Board's Advanced Placement United States History exam (whereas a qualifying score may result in college credit earned)*.

INTEGRATED SOCIAL STUDIES (12)

A relevant meshing of social studies disciplines, Integrated Social Studies emphasizes major themes of government, economics, and geography through topics that lead to an understanding of being an active participant in the U.S. and today's global society. Students will gain an understanding of political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. They will analyze current events in order to examine politically significant concepts and themes. Students will apply understandings from history, geography, economics, and civics in order to make sense of the world and interact with it as informed community members.

AP US GOVERNMENT & POLITICS (11, 12)

AP Government offers an advanced introduction of the key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. *The course also offers preparation for Kentucky's writing assessment and national college readiness assessments in addition to the College Board's Advanced Placement Government and Politics exam (a qualifying score may result in college credit earned).*

Social Studies Elective Courses

ADVANCED PLACEMENT HUMAN GEOGRAPHY (9-12)

With an emphasis on "human", AP Human Geography encompasses a study of human interaction and cross-cultural communication. If students are going to be competing and working in a global society they need a contextual background to help to understand cultures around the world. Most businesses are global or multinational which requires a knowledge of many different cultures, customs, languages, and other skills taught in this AP elective. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students employ spatial concepts and landscape analysis to examine

Credit: 1

Credit: 1

Credit: 1

socio economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). The course also offers preparation for Kentucky's writing assessment and national college-readiness assessments in addition to the College Board's Advanced Placement Human Geography (whereas a qualifying score may result in college credit earned).

GENDER STUDIES (9-12)

In an interactive blending of history and current events, students will work across social, political, and economic themes to analyze issues impacting women throughout history and across the globe. Students will hone their skills of inquiry, research, deliberation, and communication as they gain an understanding of the depth and complexity of women's issues over time.

Pathway Connections: Leadership students require an in-depth understanding of the people they lead, work with, and work for. Understanding where women have been in the past as well as the issues they face in today's world will foster a greater ability to reach clients and customers. IT and Engineering students will see more and more women, and this course will offer greater opportunities for understanding and successful collaboration in these traditionally male dominated fields. In the medical academy, analysis of women's health, policy, and global issues will be crucial as they learn to serve communities in KY and around the world.

GLOBAL ISSUES in MEDIA (9-12)

Dive into the question "Is it news or noise?" in this course that looks at Global Issues in Media. Through media, students will improve their ability to access, analyze, evaluate, create, and act using all forms of communication. Students will participate in current and controversial issue discussions, simulations of democratic processes, and service learning. Media literacy empowers people to be critical thinkers and makers, effective communicators and active citizens. *This course counts towards meeting the Humanities/Visual Perf Arts requirement.*

PSYCHOLOGY (9-12)

Psychology helps students understand themselves and other people by learning about aspects of human behavior that will help them in daily life, including interactions with others, learning and memory performance, ability to cope with pressure and understanding of psychological disorders. This introductory psychology course is designed to introduce the student to the basic scientific principles of individual behavior. The student will learn how psychologists conduct research, how humans perceive the world, and how biology affects behavior. Topics of interest include learning theory, child development, right-left brain function, memory, and creativity, emotion, dreaming, state of consciousness, hypnosis and extra-sensory perception. Second semester focuses on intelligence, personality, love, mental health and illnesses, and discrimination and careers.

AP PSYCHOLOGY (10-12)

Prerequisite: Psychology

AP Psychology introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. This course may require a summer assignment to be completed prior to the first day of school. *The course also offers preparation for Kentucky's writing assessment and national college-readiness assessments in addition to the College Board's Advanced Placement Psychology exam (whereas a qualifying score may result in college credit earned)*.

Credit: 1

Credit: 1

Credit: 1

SOCIOLOGY (9-12)

Credit: 1

With an emphasis on "social," Sociology is an introductory course dealing with the scientific study of human interaction. It will cover the roles of an individual in the family, schools, neighborhoods, rural and urban communities, and other groups with which humans identify. Basic concepts of sociology will be explored including the nature of culture, social norms, values and attitudes. During the second half of the course, students will learn to use the scientific method, carry out an investigation of social relationships, and discover how relationships arise and why they persist, and why antagonisms develop. Students will examine contemporary issues and social problems in in-depth studies.

CRIMINAL JUSTICE

Law and Justice is a study of law-civil, criminal, constitutional, and international; the legal and justice systems. Students will examine the need for rules and regulations; interpretations of the constitution, both state and federal; Supreme Court decisions; the Bill of Rights, and individual rights law, criminal law, family law, and consumer law. The study of the basic social contracts of society will enable students to understand the preferred democratic values: justice, equality, responsibility, freedom, rule of law, human rights, honesty, equity, rational process and human dignity.

AP AFRICAN AMERICAN STUDIES

AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora.

AFJROTC PROGRAM

AFJROTC is an elective program offering students the chance to become better citizens and leaders, self-confident, self-reliant and self-disciplined. Students explore the civilian, industrial, and military aspects of aerospace. College bound students may

receive an Air Force Academy nomination or an Air Force ROTC scholarship, if qualified. Or, they may receive college credit for the first year of an Air Force ROTC four year college program. Career-minded students may be able to enter the Air Force at a pay higher than most enlistees. Course work helps prepare you for positions in any military or civilian career. Additionally, there are classes on military customs and courtesies and flag etiquette, plus instruction in marching, movements and commands for parades and ceremonies. Activities for cadets include color guard team, drill team, field trips around the United States, flights aboard military aircraft, community service projects, opportunities for attending ROTC college days, formal social events and dances, summer leadership encampments, model rocketry club, and public speaking events at middle and elementary schools, and qualified students can join the Kitty Hawk National Honor Society. Uniforms, textbooks, insignia, and other equipment are provided free. Visit our website at http://www.bshs.fcps.net/departments/afjrotc to see our cadets in action. For additional information call (859) 381-3312.

AFJROTC 1 (9-12) Credit: 1 AFJROTC 2 (9-12) Credit: 1 AFJROTC 3 (9-12) Credit: 1 AFJROTC 4 (9-12) Credit: 1

AFJROTC program is a four-course sequence designed to develop Aerospace Science (AS), Leadership (LE), and wellness skills in preparation for a career in the United States Air Force. Each course in the sequence includes a selection from the AS 100 to 500, LE

100 to 500, and wellness education as identified in the AFJROTC curriculum. http://www.au.af.mil/au/holmcenter/AFJROTC/Curriculum.asp

ADVANCED AFJROTC-AIR FORCE LEADERSHIP (9-12) Credit: 1

This class is intended to challenge students who have completed or are in the process of completing their fourth year JROTC curriculum and desire advanced study of key aerospace subjects. The honors course will challenge students to perform as peer leaders and to further their knowledge of air and space operations, missions of auxiliary organizations, and to be well versed on the evolving mission of the Air Force. Lesson objectives will include, but will not be limited to the following: comprehend the role and mission of the Air Expeditionary Force, comprehend the importance of understanding the dynamics between international terrorism and the modern day Air Force, explain the importance and historical value of organizations such as the Tuskegee Airmen and Civil Air Patrol, describe the value and significance to current day military operations of Joint Operations, and value and demonstrate the importance of being an exemplary role-model and leader to underclassmen

FINE ARTS DEPARTMENT

BAND

ADVANCED BAND/THEORY (9-12)

Prerequisites: two years playing experience or permission of instructor or enrollment by audition (must enroll for full year)

This course is designed to provide students with an experience in marching band and concert band literature and fundamentals of music theory. Students electing this course are to understand that satisfactory completion of this course will require out-of-school rehearsals and performances.

ADVANCED JAZZ BAND/THEORY (9-12)

Prerequisites: audition or permission of instructor and concurrent enrollment in band, guitar, or orchestra class

This course is designed to provide an experience in the performance of jazz music. The course is for advanced level music students to provide experience in jazz concepts to include fundamentals of jazz performance, interpretation, harmonic awareness, and jazz improvisation.

ADVANCED PERCUSSION (9-12)

Credit: 1 Prerequisite: audition or permission of instructor

This course is designed for advanced level percussionists.

CHORAL MUSIC

ADVANCED CHORUS AND THEORY (9-12) Prerequisite: Instructor signature

This course includes the development of vocal techniques through the study and performance of literature of various periods and styles with a performing group of select students proficient in reading music of medium difficulty. Instruction emphasizes advanced ensemble techniques which require accurate intonation, tone production, diction, and interpretation. Theory is taught in the learned for performance. Experiences include a cappella singing and context of music opportunities for solo and small ensemble participation.

S-A CHORUS AND THEORY (SOPRANO-ALTO) (9-12)

This course includes the development of choral techniques through the study and performance of choral literature of varying periods and styles written for soprano/alto vocal range voices. This course develops the general musicianship of the student.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

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GUITAR

BEGINNING GUITAR 1 (9-12)

Guitar 1 is designed for students with little or no previous guitar/music reading experience. Students will receive guidance and direction in solving problems related to playing the guitar on a beginning level and will learn many of the different styles, skills, and techniques required to become a successful guitarist. Areas of concentration include correct posture, note reading, aural skills, flat-picking, singing songs, rhythmic patterns, chord study, fingerpicking styles, musical forms, improvisation, and performing experiences. Students must have access to a guitar at home to take this class.

ADVANCED GUITAR 2 (10-12) Prerequisite: Beginning Guitar 1

This one-year course is designed for students who have successfully completed the skills outlined in the Beginning Guitar 1 syllabus. This course includes further development of the skills necessary to become independent as a guitarist. Areas of concentration include correct posture, note reading, aural skills, flat-picking, singing songs, rhythmic patterns, chord study, fingerpicking styles, musical forms, improvisation, and performing experiences. A progression of technical proficiency is expected. Students must have access to a guitar at home to take this class.

ADVANCED GUITAR 3 (11, 12) Prerequisite: Advanced Guitar 2

Advanced Guitar 3 is designed for students who have successfully completed the skills outlined in the Advanced Guitar 2 syllabus. This course includes further development of the skills necessary to become independent as a guitarist. Areas of concentration include correct posture, note reading, aural skills, flat-picking, rhythmic patterns, chord study, fingerpicking styles, musical forms, improvisation, and performing experiences. A progression of technical proficiency is expected. Students must have access to a guitar at home to take this class.

ADVANCED GUITAR 4 (11, 12)

Prerequisites: Students must have completed Guitar 1, 2, and 3 and must own their own guitar.

This one-year course is designed for students who have successfully completed the skills outlined in the Advanced Guitar 3 syllabus. This course includes further development of the skills necessary for a successful transition to a collegiate-level guitar program. Students at this level should OWN a quality classical guitar.

ADVANCED GUITAR (Offered in FLEX) (10-12)

Credit:1

Prerequisites: Guitar 1, teacher approval

Students explore more advanced guitar-playing techniques including solo, small ensemble, large ensemble, chords, scales, music terminology, music theory & literacy, electric guitar/plectrum techniques, etc. Coursework may also apply to Banjo, Bass, Dulcimer, Mandolin, Ukulele and other plucked string instruments. Formal and informal performances are included as part of the instructional program as well as experiences in creating and responding to music. These courses teach students the appropriate care, handling, and maintenance of musical instruments. Courses are offered on multiple levels to accommodate proficiency.

PIANO/KEYBOARDING

BEGINNING KEYBOARDING (PIANO) (9-12)

Keyboard classes include music reading and writing, keyword patterns, scales, and technical skills. Literature is chosen according to individual student ability and needs. During the course of this program, some of the following aspects will be covered: keyboarding technique and performance and literature and styles, as well as history.

ADVANCED KEYBOARDING (PIANO) (9-12)

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Advanced Keyboarding 2 will include an in-depth study of music reading and writing, key word patterns, scales, and technical skills. Literature is chosen according to individual student ability and needs. The following topics will be covered: keyboarding technique and performance, literature and styles, and history.

ADVANCED KEYBOARDING 3 (PIANO) (9-12)

Prerequisite: Advanced Keyboarding 2 or permission of instructor

Advanced Keyboarding 3 emphasizes performance skills. Students will participate in a recital each semester. Literature is chosen according to individual student ability and needs. Other topics include keyboarding technique and performance, accompaniment skills, improvisation, literature and styles, and history.

ADVANCED KEYBOARD ENSEMBLE (PIANO) (9-12)

Prerequisite: Advanced Keyboarding 3

Advanced Keyboarding Ensemble is a continuation of the Advanced Keyboarding 3 class. Students will also participate in recitals during each semester and accompany voice and/or instrumental solos. They should also be able to read parts.

ORCHESTRA

ADVANCED CONCERT ORCHESTRA AND THEORY (9-12) Credit: 1 Prerequisite: all Advanced Concert Orchestra and Theory students should have at least three years playing experience or be approved through audition (must enroll for full year) This course is designed to provide the student with an experience in the performance of orchestral literature and fundamentals of music theory. Students electing this course are to understand that satisfactory completion of this course may require some out-of-school rehearsals and performances.

ADVANCED SYMPHONIC ORCHESTRA AND THEORY (9-12) Credit: 1

Prerequisite: All Symphonic Orchestra and Theory students should have at least three years playing experience or be approved through audition (must enroll for full year) This course is designed to provide the student with an experience in the performance of orchestral literature and fundamentals of music theory. Students electing this course are to understand that satisfactory completion of this course may require some out-of-school rehearsals and performances.

ADVANCED CHAMBER ORCHESTRA AND THEORY (9-12)

Prerequisite: all Advanced Orchestra and Theory students should have at least three years playing experience or be approved through audition (must enroll for full year) This course is designed to provide the student with an experience in the performance of advanced orchestral literature and fundamentals of music theory. Students electing this course are to understand that satisfactory completion of this course may require private lessons, participation in solo/ensemble, and some out-of-school rehearsals and performances.

ADVANCED PRELUDE ORCHESTRA AND THEORY (9-12) Credit: 1 Prerequisite: All Symphonic Orchestra and Theory students should have at least three years playing experience or be approved through audition (must enroll for full year) This course is

playing experience or be approved through audition (must enroll for full year) This course is designed to provide the student with an experience in the performance of orchestral literature and fundamentals of music theory. Students electing this course are to understand that satisfactory completion of this course may require some out-of-school rehearsals and performances.

Miscellaneous Music Courses

AP MUSIC THEORY (AP) (11-12) To be offered every other year

Credit: 1

Credit: 1

Credit: 1

Prerequisites: Minimum 2 yrs. in a HS performance music class & current music teacher's signature This course is designed to meet the requirements of the AP Music Theory course. This will be accomplished through the study of the elements of music (pitch, rhythm, melody, harmony, and texture) and through the development of sight-singing and musical dictation skills and will strengthen and enhance the student's oral, aural, and analytical skills in music strive to comprehension.

MARIACHI ENSEMBLE (8-12)

Students will learn, explore, and refine ensemble skills through creating, performing, responding, and connecting using traditional Mariachi literature. Students will work directly with the ensemble directors to select repertoire and adjust written arrangements to fit the needs of the ensemble group. Students will learn about the culture, history, and performance etiquette of a professional mariachi ensemble. We will concentrate on correct instrumental techniques, music reading skills, memorization, ear training, and stage presence.

DRAMA/THEATRE

INTRODUCTION TO THEATRE 1 (9-12)

In this highly participatory and performance based-class, students will be introduced to theatre performance elements including ensemble building, body, voice, improvisation, and character development. The class will also survey classic and modern plays and musicals to gain a basic understanding of theatre history, terminology, and practices.

ADVANCED THEATRE 2 (10-12)

Prerequisite: Intro to Theatre

This highly participatory and performance-based second year course offers serious drama students an opportunity to focus on acting techniques. Studying theorists such as Stella Adler, Anne Bogart, Robert Cohen, Uta Hagen, Rudolf Laban, Stanford Meisner, Lee Strasberg, Viola Spolin, and Constantin Stanislavski, students will create, perform, and respond to work generated in the style of these theorists. Students will create and perform a 10-minute play and a one-act play.

ADVANCED THEATRE 3 (11, 12)

Prerequisites: earning a "B" or better in Intro to Theatre and Advanced Theatre 2 and teacher approval

In this interactive and practical third year course, students will explore theatre history, theorists, and dramatic literature from Greek theatre through contemporary drama. This class will survey theatre history and cultures across the word including Greek, Roman, Dark Ages, Medieval, Renaissance, Romantic, Shakespearean, Restoration, Asian, Early 20th Century, Golden Age of Musicals, Modern, Broadway, and Contemporary. Students will gain an understanding of theatre and its impact on our world and culture. Students will perform a one-act play and various devised works.

ADVANCED THEATRE 4 (11, 12)

Prerequisites: Minimum "B" in Intro to Theatre, Advanced Theatre 2, Advanced Theatre 3 & teacher approval

In this highly participatory fourth year advanced course, students will focus on directing pieces of theatre. Students will explore the directing process from concept/theme through script analysis and staging. Students will direct dynamic scenes from classic and contemporary plays that will be fully mounted at the end of the semester. Second semester, students will focus on the art of devising and creating pieces of theatre. Students will learn the principles of devising, and generate their own work based on themes, ideas, and concepts of their own artistic interests.

TECHNICAL THEATRE

TECHNICAL THEATRE 1 (9-12)

Students will be introduced to the behind the scenes work of technical theatre. They will explore the elements and principles of design as it applies to theatre scenic, costume, lighting, sound, and

Credit: 1

Credit: 1

Credit 1

Credit: 1

Credit: 1

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props design and construction. Students will assist in construction of all elements of the BSHS fall play and spring musical.

ADVANCED TECHNICAL THEATRE 2/3/4 (10-12)

Prerequisite: Introduction to Technical Theatre 1

In this hands-on advanced course, students will begin to work as designers and technical directors. Students will take a play from script to completion as part of a team of theatre artists collaborating together. Students will be responsible for designing the set, lights, props, costumes, and sound for all BSHS theatre and class productions.

VISUAL ART

ART 1 (9-12)

This is an introductory level course, which serves as a prerequisite for most other art classes. This course is designed to teach the principles and elements of art. Students will learn basic drawing skills, painting media, the printmaking process, and three-dimensional art and crafts.

ART 2 (10-12)

Prerequisite: Art 1

This course continues to build on the knowledge and skills learned in Art 1. Students will use the skills and techniques learned previously to enhance artwork in 2-D and 3-D design using a variety of media. The 2-D media includes graphite, charcoal, pastels, color pencil, acrylic and watercolor techniques. 3-D work explored in class includes ceramics, cardboard sculpture and non-traditional sculpture materials. The student will develop an ability to make effective choices concerning media, techniques, subject matter and methods of interpretation. This is a prerequisite for Advanced Art.

ART and ENGINEERING (10-12)

Prerequisite: Art 1

Art and engineering often intersect in many areas. Includes projects such as colossal sculptures, architectural drawing, and construction design. This class is designed specifically for the Engineering Academy.

ART and MEDICAL SCIENCE (10-12)

Prerequisite: Art 1

Increase your ability to succeed in your medical classes by studying human anatomy through the of an artist. Includes projects like sketching of body systems, art therapy, and facial eves reconstruction. This art class is designed specifically for the Medical Academy.

ART OF THE FASHION INDUSTRY (10-12)

Prerequisite: Art 1

Want to design clothing? Learn to sew? Stage a fashion show? This course is for you! Through fashion, consumer awareness, clothing selection and care, garment construction, technology, and careers, students will experience the art of the fashion industry. (also called Clothing construction & design)

CRAFTS 1 (10-12) Prerequisite: Art 1

This course explores the rich heritage of folk art. The crafts class is designed to acquaint the with the materials that would have been used by many cultures, with focus on student Appalachian Arts. Projects may include weaving, pottery, soft sculpture, felting, mosaics, papier mâché, basketry, etc. It is recommended that students who sign up for Crafts also sign up for Fibers in the spring semester.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

This course is a continuation of Crafts 1 with a focus on using fibers (yarns, threads, and fabric). Students will use the skills developed in Crafts 1 to explore mixed media with fibers. Projects may include pottery, printing, weaving, wrapping techniques, coiling, and quilting.

DRAWING 1 (10-12)

Prerequisite: Art 1

This course will teach basic drawing skills and develop sensitivity to line, space, form, texture, color and shape. A variety of drawing techniques and media will be explored.

DRAWING 2 (11-12)

Prerequisite: Drawing 1

This course will teach advanced drawing skills and techniques. Students will develop skills in dynamic figure drawing, portraiture and anatomy. A variety of drawing techniques and media will be explored including charcoal, colored pencil, chalk pastels, ink and watercolor.

PAINTING 1 (10-12)

Prerequisite: Art 1

Students will be involved with color theory as it applies to the painting processes (temper, watercolor, and acrylic). Functions of known artists' works, schools, and styles will be explored with an emphasis on experimentation with the media.

PAINTING 2 (11-12)

Prerequisites: Painting 1

Students will build on the foundations of Advanced Painting 1, continuing to explore schools of art while focusing on their craft through experimentation with various media. The curriculum will further explore the principles and elements of art studied in Advanced Painting 1, enabling students to gain better mastery of their craft. Students will participate in critiques throughout the year.

POTTERY 1 (10-12)

Prerequisite: Art 1

Pottery is designed to introduce the student to the medium of clay and the methods of clay construction. Emphasis will be placed on the hand-forming methods of pinch, coil, and slab techniques. An introduction to wheel-formed pottery, throwing techniques, and slab procedures will be included.

SCULPTURE (10-12)

Prerequisite: Art 1

Sculpture will provide students with the opportunity to learn to express their ideas in three-dimensional form. A variety of sculpture media for both additive and subtractive methods will be explored. Students will have the opportunity to display sculptures in public.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

PRE-ADVANCED PLACEMENT STUDIO ART (10-12)

Prerequisites: Art 1 and intermediate art teacher's approval

Planning to take AP art? Just want to advance your art beyond the foundation classes? Pre-AP is a class for the artist who wants to focus on a medium or theme and get ready for AP. The class also serves as a studio lab time for AP students

AP ART STUDIO: 2D or 3D (AP) (11-12)

Prerequisites: Art 1, an intermediate-level art courses, or teacher's signature

This is a special college-level course that takes a full academic year. It is challenging and stimulating and, compared to other high school art courses, often takes more time, requires more greater opportunity for individual progress and accomplishment, and explores work, gives subjects in great depth. Students will build a portfolio focused on the elements and principles of art, composition, student voice, technique, and mark making ability. The course can be completed in many different mediums, including drawing, painting and printmaking.

StationArts Electives

StARTS Portfolio Development (9-12)

Prerequisite: 1 StationArts course (any music, dance, drama, or visual art) StationArts Capstone is a class for students enrolled in the StationArts Program and is offered during the flex period. Through this class, students will create an arts capstone portfolio that can be used as students are applying for colleges and scholarships. The portfolio will contain digital images of art works or digital recordings, artists' reflections of the chosen pieces, an overall artist statement, a resume, and recommendation letters. Students in this class will also be assigned experiential learning opportunities to further enhance their understanding of arts careers and opportunities. Students will work with community arts partners to glean what education and skills are necessary for a successful arts career

HISTORY OF VISUAL and PERFORMING ARTS

HISTORY & APPRECIATION OF VISUAL & PERFORM. ARTS (12) Credit: 1 Through a contemporary lens, students will study the cultural and historical significance of visual art, music, dance, and theatre. Students will participate in activities to fulfill standard requirements, such as improvisation, painting, percussion and dance. This course fulfills the graduation requirements for the Visual and Performing Arts as outlined in the Kentucky High School Program of Studies. Students can fulfill this graduation requirement by completing two credits in any Visual/Performing Arts course (i.e. art, drama, band, orchestra, choir, guitar, piano).

HEALTH/PHYSICAL EDUCATION DEPARTMENT

Health/PE Core Classes

HEALTH EDUCATION (9)

This class develops health literate students who have the knowledge and skills to "access information, resources and services necessary to maintaining and promoting health" (Shape America). Health students will have the opportunity to apply these skills to health information in order to make judgments and make decisions in everyday life concerning health care, disease prevention, and health promotion to maintain or improve their quality of life. We will also spend time building vocabulary and technology skills. Discussion includes mental health, drugs, alcohol and tobacco, sex education, sexually transmitted diseases, infectious diseases, safety and first aid, cardiopulmonary resuscitation (CPR), nutrition, consumer health, and non-infectious diseases.

PHYSICAL EDUCATION 1 (9)

This class will "develop physically literate students who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity" (Shape America). The course Physical Education 1 will involve the teaching of lifetime physical activity and fitness with an

Credit: 1/2

Credit: 1/2

28

Credit: 1

Credit: 1

Credit: 0.5

emphasis on the health-related fitness components that include walk-jog program, flexibility and circuit training, and skill-related fitness circuits. Physical activity and sports include tennis, pickleball, badminton, flag football, soccer, ultimate Frisbee, yard games, Frisbee, basketball, volleyball, dance, golf, and team-building activities.

Health/PE Elective Classes

FITNESS & WEIGHTS (10-12) Prerequisite: Physical Education 1

This course helps students understand athletic conditioning through weight training and various cardiovascular activities. Students are required to develop their own conditioning program then apply it in the weight room. This is an activity class where students are expected to workout and participate each class period.

CONDITIONING FOR WOMEN (10-12)

Prerequisite: Physical Education 1

This course helps female students understand athletic conditioning through weight training and various cardiovascular activities. Students are required to develop their own conditioning program then apply it in the weight room. This is an activity class where students are expected to work out and participate each class period.

PHYSICAL EDUCATION 2 (10-12)

Prerequisite: Physical Education 1

Physical Education 2 is designed for students who desire to develop advanced skills in selected games and sports including physical fitness, sports appreciation, lacrosse, and golf. This is an activity class where students are expected to workout and participate each class period.

ADVANCED PHYSICAL EDUCATION 3 (11-12)

Prerequisite: Physical Education 1 & 2

Physical Education 3 is an elective class for upperclassmen who have successfully completed both PE 1 and PE 2 classes. PE 3 will give students the opportunity to participate in physical activity in an advanced setting. This is an activity class and students are expected to participate and workout each day.

MISCELLANEOUS ELECTIVE

PEER TUTORING (11, 12)

Prerequisite: Application and GPA of 2.5 or higher

This course is designed to provide students with a wide variety of teacher assistant experiences. You can choose to interact with students with moderate or severe disabilities in order to increase understanding and awareness and assist students in learning basic reading and math skills. Opportunities are also available to assist these students in their adapted physical education class. Other students may be asked to assist English language learners. Please complete an application and indicate the students with whom you prefer to work.

WORLD LANGUAGES DEPARTMENT

All world language courses are electives. Students planning to pursue an academic career after senior high school should study a world language while in secondary school. Students must demonstrate competency in the second year of a world language to meet the state of Kentucky's pre-college curriculum language requirement. Many colleges and/or universities have their own compulsory language requirements. Some universities will give college credit and/or place students in the proper level so they will not have to repeat skills they have already mastered. The advanced placement program meets the requirements set forth by the College Board.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

CHINESE

ADVANCED CHINESE LANGUAGE AND CULTURE 1

This is an introductory course for students with little or no previous background in standard Chinese (Mandarin). In this class, students will primarily focus on developing oral proficiency. Character recognizing and writing will be introduced. Various aspects of Chinese culture will be introduced throughout the course. By the end of this course, in listening and speaking, students can understand questions about them, their experience, and their surroundings and can carry on simple conversations on these familiar topics. In reading, students can provide basic information on familiar topics.

ADVANCED CHINESE LANGUAGE AND CULTURE 2 Prerequisite: Advanced Chinese Language and Culture 1

This class provides experience to increase speaking, understanding, reading, and writing ability in the language as it is used in its culture. Chinese history and culture are further explored. By the end of this course, students can understand the main idea and some details in texts that contain familiar vocabulary. Students can provide information on familiar topics in oral or written form using a series of sentences.

ADVANCED CHINESE LANGUAGE AND CULTURE 3

Prerequisite: Advanced Chinese Language and Culture 2

In Chinese 3, students review and continue to develop language skills introduced in Chinese 1 and Chinese 2. Vocabulary is expanded. Learning and writing more complex sentences, paragraphs, and short letters using Chinese characters are stressed along with continued development of spoken and listening comprehension skills. Chinese culture, history, and geography are further explored through various activities, discussions, and oral and written reports. Students can use the language to perform daily tasks: writing invitations, sending email notes, filling out forms, ordering food, expressing views and ideas, etc.

ADVANCED CHINESE LANGUAGE AND CULTURE 4

Prerequisite: Advanced Chinese Language and Culture 3

This class emphasizes students' ability to speak, understand, read, and write in the language. The students will be engaged in communicative activities that will prepare them for the Advanced Placement course. The ability to work independently and the desire to advance in all areas of the language are essential. Through selected reading and research, students continue to expand their knowledge of Chinese culture, social conventions, and concepts. Students will speak, read, and write extensively in the language.

ADVANCED PLACEMENT CHINESE LANGUAGE AND CULTURE (AP) Credit: 1

This prepares students for the Advanced Placement exam. It prepares students to understand and use the complexities of language fluently and accurately to perform communicative tasks. The course engages students in an exploration of culture in contemporary and historical contexts, developing students' awareness and appreciation of tangible and intangible products, practices, and perspectives.

FRENCH

FRENCH 1

Students will learn basic listening, speaking, reading, and writing skills. They will also be introduced to French culture and career opportunities utilizing French language skills.

FRENCH 2

Prerequisite: French 1

Students will continue improving listening, speaking, reading, and writing skills. They will also learn about famous French people and do some extended readings on popular topics. Emphasis

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

ADVANCED FRENCH 3

Prerequisite: French 2 (recommended earning a "C" or better)

The ability of students to express their ideas accurately and resourcefully both orally and in writing with reasonable fluency will be one of the main goals of this level. Students will assimilate an understanding of the target language through the study of French culture as reflected in magazines and short excerpts from literature. The class will be fast-paced.

ADVANCED PLACEMENT FRENCH (AP)

Prerequisites: French 3 and teacher recommendation

The Advanced Placement French language course is the equivalent of an intermediate college course in advanced French composition and conversation. Mastery of the following objectives will better prepare the student opting to take the Advanced Placement test: the ability to comprehend and express ideas orally in formal and informal French; the acquisition of vocabulary to allow the easy, accurate reading of newspaper and magazine articles as well as modern French literature; the ability to compose expository passages; and the in-depth review of grammatical structures.

SPANISH

SPANISH 1

Students will learn basic listening, speaking, reading, and writing skills. They will also be introduced to Spanish culture and career opportunities that will utilize Spanish language skills.

SPANISH 2

Prerequisite: Spanish 1

Students will continue improving listening, speaking, reading, and writing skills. They will learn about famous Spanish people and do some extended readings on popular topics. Emphasis will be placed on grammatical structures and vocabulary development.

ADVANCED SPANISH 3

Prerequisites: Earn a "C" or better in Advanced Spanish 2 and teacher recommendation The ability of the students to express their ideas accurately and resourcefully both orally and in writing with reasonable fluency will be one of the main goals of this level. Students will assimilate in understanding of the target language through the study of Spanish culture as reflected in magazines and short excerpts from literature. The class will be fast-paced.

SIP ADVANCED SPANISH 4

Prerequisites: Earn a "C" or better in Advanced Spanish 3 and teacher recommendation This accelerated course will stress the use of oral Spanish in giving speeches and taking part in class discussion on controversial topics or literary works. A review of grammar will be based on common errors made by the class. Grammar study will be individualized using workbook exercises. The reading material will include both classical literary works from a variety of Hispanic authors. Spanish 3 and Spanish 4 will help high-achievers prepare for the Advanced Placement exam.

ADVANCED PLACEMENT SPANISH LANGUAGE (AP)

Prerequisites: Advanced Spanish 3 and Advanced Spanish 4 and teacher recommendation The Advanced Placement Spanish Language course is the equivalent of an intermediate college course in Spanish composition and conversation. Mastery of the following objectives will prepare the student opting to take the Advanced Placement test: the ability to comprehend and express ideas orally in formal and informal Spanish; the acquisition of vocabulary to allow the easy, accurate reading of newspaper and magazine articles as well as modern Hispanic literature; the ability to compose expository passages; and the in-depth review of grammatical structures.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Credit: 1

ENGINEERING 2 (10-12)

ADVANCED PLACEMENT SPANISH LITERATURE (AP)

Prerequisites: Advanced Spanish 4 & AP Spanish Language and teacher recommendation The Advanced Placement Spanish Literature course provides a perfect curriculum for college-bound students to learn to read critically, write and speak clearly representative works of Peninsular and Latin American Literature, and become acquainted with characteristics of major literary movements. The course activities provide students with the opportunity to accomplish an accurate reading of literature in Spanish, in addition to the ability to comprehend formal and informal spoken Spanish, to compose expository passages, and to express ideas orally with fluency and accuracy. The course is conducted in Spanish. Note: Students are required to volunteer 30 hours using their Spanish skills.

SPANISH FOR NATIVE SPEAKERS (9-12)

This year-long world languages course is designed to develop and challenge students' ability in speaking, reading, writing, listening, and cultural development in Spanish. This course offers Spanish-speaking students an opportunity to study Spanish formally in an academic setting the same way native English-speaking students study English Language Arts. The course allows students to reactivate the Spanish they have learned previously and develop it further, to learn more about their language and cultural heritage, to acquire Spanish literacy skills, to develop or augment Spanish academic language skills, to enhance career opportunities, or to fulfill a world language college admission requirement.

SPANISH GRAMMAR AND CULTURE 1 (10-12)

Prerequisites: native Spanish speaker (read and write in Spanish) and application This course will focus on various grammatical concepts difficult for the native speaker of Spanish. Students will study the cultural differences among all Spanish speaking countries through the use of personal experiences, videos, and periodicals.

ADVANCED SPANISH GRAMMAR AND CULTURE 2 (11, 12) Credit: 1 Prerequisites: Spanish Grammar and Culture 1, native Spanish speaker (read and write in Spanish), and application

This course will continue to develop grammatical concepts for the native speaker of Spanish. The primary focus is in writing and Spanish literature.

ADVANCED HISPANIC LITERATURE AND FILM (12) Corequisite: Advanced Placement Spanish Literature

This course will enable students to pursue an understanding of film within the context of a wider knowledge of Hispanic culture. Hispanic Literature and Film covers both the Iberian Peninsula and Latin America and integrates the study of Hispanic literature and film. Students will explore literary and film techniques, and in depth analysis and interpretations. There will be discussions and analytical writings.

ACADEMY OF ENGINEERING, MANUFACTURING, & ROBOTICS **Engineering Design Pathway** Credit: 1

ENGINEERING 1 (9-12)

Introduction to Computer Aided Drafting and Engineering Design Principles will be the focus of this course. This course continues to apply the skills, concepts, and principles of engineering. Students explore various technological systems and engineering processes in related career fields. Topics include investigating technological systems, design optimization, and problem solving. Students utilize CAD and physical and virtual modeling concepts to construct, test, collect, and report data. Instruction should be enhanced through participation in Kentucky Technology Student Association challenges.

Credit: 1

Credit: 1

Credit: 1

Credit: 1

Prerequisite: ENGINEERING 1

This is a fundamental course that provides a project-based learning approach to understanding the principles and concepts of physics and associated mathematics for most engineering technology programs. Students explore various careers and disciplines of engineering areas, problem solving and core technology such as, but not limited to manufacturing, power/energy/transportation, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy, and computer-aided design. Instruction should be enhanced through participation in Kentucky Technology Student Association challenges.

TECHNICAL DESIGN 1 (10-12)

Prerequisites: Engineering 1 and Engineering 2

This is considered a basic course that will provide students with instructions in the characteristics and evolution of drafting technology, underlying principles of design and fundamental knowledge and skills in the use of mechanical drawing, illustrations, and various forms of mechanical drawings, geometry, and applied mathematics that apply to architectural and/or engineering design. The course also includes an introduction to various forms of computer-aided software to gain basic skills and knowledge.

ENGINEERING & ENGINEERING TECHNOLOGY DESIGN (CAPSTONE) (12) Cr: 1 **Prerequisites: ENGINEERING 1, ENGINEERING 2, TECHNICAL DESIGN 1** A project and research-based Computer Aided Drafting and Design course that extends the learning experiences where students focus on mechanical, electrical, fluid and thermal systems allowing in depth exploration in selected disciplines of engineering areas such as manufacturing, power/ energy/transportation, bio-medical, robotics, hydraulics, electricity/electronics, communications, construction systems, alternative energy and computer aided design and problem solving

Mechanical Engineering Pathway

ENGINEERING 1 (9-12) See page 31 for course description.

ENGINEERING 2 (10-12) See above for course description.

MANUFACTURING ENGINEERING (12)

Prerequisites: ENGINEERING 1 and 2 This course is to allow students the opportunity to develop a project from vision to reality by working with teams to design, engineer, manufacture, construct, test, redesign, and produce a finished project. This course integrates Computer Integrated Manufacturing (CIM) with other skills that the student has learned in previous pathway courses.

OR

ROBOTICS ENGINEERING (10-12)

Prerequisites: Engineering 1 & 2

Foundational course for robotics that includes beginning programming, construction, and electrical systems of robotics. Beginning automation applications and critical thinking skills and problem solving.

ENGINEERING & ENGINEERING TECHNOLOGY DESIGN (CAPSTONE)(12)Credit: 1 Refer to page 34 for course description and prerequisites.

Automation Pathway

ENGINEERING 1 (9-12) Refer to page 31 for course description. **ENGINEERING 2 (10-12)** Refer above for course description and prerequisites.

ROBOTICS ENGINEERING (10-12)

Prerequisites: Engineering 1 & 2

Foundational course for robotics that includes beginning programming, construction, and electrical systems of robotics. Beginning automation applications and critical thinking skills and problem

Credit: 1

Credit: 1

Credit: 1

Credit: 1

33

solving.

ROBOTICS DESIGN & ESSENTIAL SYSTEMS (11, 12) Prerequisites: Foundations of Robotics, Algebra 2

This course provides students with content and skills essential to the design and operation of robotic systems. Students' activities will include artificial intelligence, specialized sensors, electronic applications, engineering technologies, environmental physics, manufacturing, topographical considerations, programming, motions physics, electric motors, communications, simulations, simulation and modeling, and critical thinking skills.

OR

ENGINEERING & ENGINEERING TECHNOLOGY DESIGN (CAPSTONE)(12)Credit: 1 Refer to page 32 for course description and prerequisites.

THE ACADEMY OF INFORMATION TECHNOLOGY

Computer Programming Pathway

The Computer Programming pathway courses will prepare students to design, create, and troubleshoot the latest programming languages used in industry. Students will complete the pathway with the four following courses: Computer Literacy, Computational Thinking, Introduction to Programming, and a targeted course for a specific programming language as capstone such as Project-based Programming, or JAVA. Students could also include AP Computer Science Principles (taught as a math elective). Upon completion of this career pathway, students will be prepared for an entry level position in the information technology field or continue their education in computer programming.

COMPUTER LITERACY (9, 10)

This course introduces students to the main components of computer literacy including computer fundamentals, key applications, and living online. The course provides an introduction to the computer and the convergence of technology as used in today's global environment, and it introduces topics including computer hardware and software, file management, the Internet, e-mail, the social web, green computing, and security and computer ethics. It presents basic use of application, programming, systems, and utility software. Basic keyboarding skills are strongly recommended.

COMPUTATIONAL THINKING (10)

Prerequisite or Corequisite: Computer Literacy or approval from instructor

This course allows students to analyze the structure of the world wide web, apply basic principles of project design and HTML/CSS during first semester. Game Design, Javascript, and microcontrollers are included in the content for the second semester. The class promotes understanding of computer programming and logic by teaching students to "think like a computer." The class also covers skills needed to develop and design language-independent solutions to solve computer related problems and developmental and design basics, including use of variables, control and data structures, and principles of command-line and object-oriented languages.

INTRODUCTION TO PROGRAMMING (11, 12)

Prerequisite: Computational Thinking or approval from instructor

This course focuses on the general writing and implementation of generic and atomized programs to drive operating systems. It includes software design, languages, and program writing; troubleshooting; etc. It introduces students to fundamental programming concepts using an industry-specific or emerging programming language and includes data types, control structures, simple data structures, error-handling, modular programming, information and file processing, and uniqueness of Python.

Credit: 1

Credit: 1

es. Credit: 1

AP COMPUTER SCIENCE A / JAVA (12)

Credit: 1 Prerequisite: Computer Literacy, Computational Thinking, Introduction to Programming or approval from instructor

This course introduces students to fundamental programming concepts using the Java programming language. Topics include data types, control structures, simple data structures, error handling, object oriented programming, graphical user interfaces, and modular programming.

INTRODUCTION TO 3D PRINTING TECHNOLOGY

An introduction to additive rapid prototyping manufacturing (three-dimensional printing), and its applications in conjunction with computer technology, including hardware, software, three dimensional printing technology, file management, internet, security, and computer intellectual property ethics. Presents basic use of applications, programing, systems and utility software.

Project Based Programming (11, 12)

Prerequisite: Computer Literacy, Computational Thinking or approval from instructor

Students will create projects that require computer science fundamentals and extensive research for successful completion. Students will work either solo or in a team to execute a project decided upon by the student(s). Students must learn and demonstrate proficiency in time management, scope, research, computer science, and teamwork to be successful in this course. Finally, students will engage in leadership skills by being held accountable for completion of their tasks or project. The teacher will act more as facilitator in this course.

In addition to elective choices from other IT Academy majors, and Programming majors may also choose these electives:

INFORMATION TECHNOLOGY CO-OP (12)

Prerequisite: Approval from IT Academy School Counselor

The objective of this course is to allow students to experience an on-the-job environment while earning high school elective credits. They will apply the skills learned in a technology pathway to their work experience. In addition to work based learning, students will be provided with instruction in class on workplace issues in computerized business applications, communication, and career development skills. The course content includes the following areas: Employability, Professional Development, Communication, Personal Finance, Google Suite, Microsoft Office Outlook.

WORK BASED REQUIREMENTS: You must be presently working and continue to work in Co-Op position to stay in the program. If you are terminated from your position, you will be removed from the Co-Op class if you do not find employment again within two weeks of leaving your job. Before you quit a job to go work at another job, make sure you have started working at the new work station (earning hours) before you quit your old job.

CREDITS FOR COURSE: You can earn 1.5 credits each semester if you work 270 hours and up each semester. This means that you can earn 3 total credits for the entire year (1.5 - 1st semester for 270 hours and another 1.5 credits for semester 2 [270 hours] = 3 total. If you earn 1.5 credits for the semester, you will earn 3 letter grades for the course. Your grade will be calculated as such: .5 – for taking and passing Co-Op course (letter grade)

.5 - for working 135 - 269 hours (employment credit)

.5 – for working over 270 (additional employment credit)

INFORMATION TECHNOLOGY INTERNSHIP (12) Prerequisite: Approval from IT Academy School Counselor

This internship provides supervised work-site experience for high school students who are enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee-employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less).

Credit: 1

Credit: 1

Credit: 1

DUAL CREDIT INTRODUCTION TO DATABASES (11) Prerequisite: Computer Literacy

Programmers need to "think like a computer". This course is part 1 of 4 in the Informatics Series with BCTC. Core concepts for the design, creation, and manipulation of relational databases. Analysis of data requirements, conceptual modeling, definition of the relational model, relational database design and normalization, and database implementation; manipulation of relational databases using relational algebra with SQL.

DUAL CREDIT COMPUTATIONAL THINKING (11)

Prerequisite: Computer Literacy, Introduction to Databases

Continuing your training to "think like a computer". As part 2 of the Informatics Series with BCTC, this course covers skills needed to develop and design language-independent solutions to solve computer-related problems. Covers development and design basics including use of variables, control and data structures, and principles of command-line and object-oriented languages.

DUAL CREDIT ELEMENTARY PROGRAMMING (12)

Part 3 of the Informatics Series with BCTC. This is an elementary introduction to programming (Python) for those with no previous programming experience. The class places emphasis on understanding how to read and write basic procedural programs, and an understanding of the concepts of algorithm and execution.

DUAL CREDIT OBJECT-ORIENTED PROGRAMMING 1 (12)

Part 4 of the Informatics Series with BCTC. This course provides instruction in elementary object oriented programming (C^{++}) concepts and practice: types, decisions, loops, methods, arrays, classes; design; and problem solving. It is an intensive introduction intended for students with programming experience.

STLP (10-12)

The Student Technology Leadership Program (STLP) provides a means for students to design, create, connect, and learn while using technology. The STLP will develop projects which enhance the academic, social, and emotional growth of the student, encourage multi-age collaboration by forming innovative learning partnerships between students with different technology skills, and benefit communities **and** the school.

Cinematography and Video Production Pathway

This career pathway prepares students to communicate dramatic information, ideas, moods, and feelings through the making and producing of videos and cinematographic expression. The pathway includes the theory of video, video

technology and equipment operation, video production, video directing, video editing, cinematographic art, video and audio technique, and multimedia production. It prepares students to function as staff, producers, directors, and managers of media programming and media organizations. It includes writing and editing; performing; media regulations, law, and policy; aesthetic meaning, appreciation, and analysis; construction, development, processing, modeling, simulation, and programming of audio and moving image programs and messages and their transmission, distribution, and marketing; as well as contextual, cultural and historical aspects and considerations.

INTRODUCTION TO MEDIA ARTS (9, 10)

This course is an introduction to and survey of the creative and conceptual aspects of designing media arts experiences and products, including techniques, genres and styles from various and combined media and forms, including moving image, sound, interactive, spatial and/or interactive design. Typical course topics include aesthetic meaning, appreciation, and analysis; composing, capturing, processing, and programming of media arts products, experiences, and

Credit: 1/2 (S1)

Credit: 1/2 (S2)

Credit: 1/2 (S1)

Credit: 1

Credit: 1

Credit: 1/2 (S2)

VIDEO STUDIO FUNDAMENTALS (10, 11)

Credit: 1 Prerequisite: Introduction to Media Arts

This course will expose students to the materials, processes, and artistic techniques involved in creating video productions. Students learn about the operation of cameras, lighting techniques, camera angles, depth of field, composition, storyboarding, sound capture, and editing techniques. Course topics may include production values and various styles of video production (e.g., documentary, storytelling, news magazines, and animation). Students may be exposed to digital and traditional film. As students advance, they are encouraged to develop their own artistic styles. Major filmmakers, cinematographers, video artists, and their work may be studied.

STUDIO DIRECTING AND PERFORMANCE (11, 12)

Credit: 1 Prerequisite: Introduction to Media Arts, Video Studio Fundamentals

This course explores the role of the director within the studio system. Students develop knowledge and skills in studio multi-camera and field television production. Students also develop performance skills for broadcasting including interpretation of copy, news casting, and ad lib announcing. The course covers techniques of narrative and nonfiction writing and scripting and the analysis and writing of radio, television, and video materials, including storytelling and screenwriting.

ADVANCED STUDIO PRODUCTION (12)

Prerequisite: Introduction to Media Arts, Video Studio Fundamentals, and pre/co-requisite with Studio Directing and Performance

In this course, students will explore the creative and conceptual aspects of designing and producing moving images for the variety of cinematic, film/video, and multimedia presentations including fictional dramas, documentaries, music videos, artistic and experimental presentations and/or installations, interactive, immersive and performance media, etc. Typical course topics include aesthetic meaning, appreciation, and analysis of moving imagery; all processes of development including pre-production planning and organization, production and postproduction methods, tools, and processes; moving image presentation, transmission, distribution, and marketing; as well as contextual, cultural, and historical aspects and considerations.

MEDIA ARTS INTERNSHIP (12)

Prerequisite: Approval of IT Academy Counselor

Internship for CTE courses provides supervised work-site experience for high school students who are enrolled in a course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. A student receiving pay for an intern experience is one who is participating in an experience that lasts a semester or longer and has an established employee employer relationship. A non-paid internship affects those students who participate on a short-term basis (semester or less). All information references to the Work Based Learning Manual.

MEDIA ARTS CO-OP (12)

Prerequisite: Approval of IT Academy Counselor

Cooperative Education for CTE courses provides supervised worksite experience related to the student's identified career pathway. A student must be enrolled in an approved corresponding Media Arts pathway course during the same school year that the co-op experience is completed. Students who participate receive a salary for these experiences, in accordance with local, state and federal minimum wage requirements according to the <u>Work Based Learning Manual</u>.

SPECIAL TOPICS - VIDEO PRODUCTION (10-12)

Special Topics courses may be utilized, with justification for the course and course objectives, upon approval by the Media Arts Consultant related to the career major. Completed tasks are

Credit: 1-3

Credit: 1

Credit: 1-3

Credit: 1

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defined by the teacher and approved by the Media Arts Consultant in the Office of Career and Technical Education.

Cinematography & Videography Electives

BROADCAST JOURNALISM (9-12)

Credit:1

Prerequisites: IT Cinematography or Graphic Design pathways (recommended but not required), teacher recommendation and high attendance record.

Students will be taught the skills and knowledge on how to deal with the many pressures and challenges of producing a pre-recorded news show. Students will research, gather, and analyze information that will be used to create video productions for broadcast for our school's weekly news. Students will work in teams to plan, script, film, and edit their segment that is added to the broadcast for the week. Skills learned: basic journalistic skills, video production skills, and technological editing skills.

**This course is during flex for credit.

DIGITAL IMAGING (11, 12)

See description on page 37.

Graphic Design Pathway

This career pathway prepares students to apply media arts skills that focus on the general principles and techniques for effectively communicating ideas and information, and packaging products, in digital and other formats to business and consumer audiences and may prepare individuals in any of the applied art media, including aesthetic meaning, appreciation, and analysis; construction, development,

processing, modeling, simulation, and programming of interactive experiences; their transmission, distribution, and marketing; as well as contextual, cultural, and historical aspects and considerations.

INTRODUCTION TO MEDIA ARTS (9, 10)

This course is an introduction to and survey of the creative and conceptual aspects of designing media arts experiences and products, including techniques, genres and styles from various and combined media and forms, including moving image, sound, interactive, spatial and/or interactive design. Typical course topics include aesthetic meaning, appreciation, and analysis; composing, capturing, processing, and programming of media arts products, experiences, and communications; their transmission, distribution, and marketing; as well as contextual, ethical, cultural, and historical aspects and considerations.

TWO-DIMENSIONAL MEDIA DESIGN (10-12)

Prerequisite: Introduction to Media Arts

This course is a proficient study and production of creative and conceptual aspects of designing and producing digital imagery, graphics, and photography, including techniques, genres, and styles from fine arts and commercial advertising; internet, multimedia, and web design; industrial; and virtual design. Students use a computer as an electronic drawing tool to solve visual communications and illustration problems in designing products. This course entails the use of current software for two

dimensional illustration, creating and integrating text, using color, and importing and exporting files. Course topics include aesthetic meaning, appreciation, and analysis; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution, and marketing; as well as contextual, cultural and historical aspects and considerations.

DIGITAL IMAGING (10-12)

Prerequisite: Intro to Media Arts or Art 1 Co-requisite: Two-Dimensional Media Design

Credit: 1

Credit: 1

Credit: 1

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Graphic Design Electives **YEARBOOK 1 (10-12)** Prerequisite: Introduction to Media Arts OR Journalism 1 Prerequisite: Intro to Media Arts OR Journalism 1, and Yearbook 1

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This course is an accomplished study and production of creative and conceptual aspects of designing and producing digital imagery, graphics, and photography. This includes techniques, genres, and styles from fine arts and commercial advertising, internet and multimedia, web design, and industrial and virtual design. Students use a computer as an electronic drawing tool to solve visual communications and illustration problems in designing authentic products. This course entails an accomplished use of current software for two-dimensional illustration, creating and integrating text, using color, and importing and exporting files. Typical course topics

include aesthetic meaning and analysis of computer-generated works; composing, capturing, processing, and programming of imagery and graphical information; their transmission, distribution and marketing; as well as contextual, cultural and historical aspects and considerations "

ADVANCED PRODUCTION DESIGN (11, 12)

Prerequisite: Introduction to Media Arts, Two-Dimensional Media Design, Digital Imaging This course emphasizes an advanced and independent use of compositional theory, elements and principles of design, techniques, and creative processes for effectively performing the function of persuasion and information through use of materials and media to create visual effects to produce original authentic works. Students will demonstrate an advanced level of creative expression to a variety of authentic design products (e.g. various print mediums such as magazines, newspapers, billboards, fictional and informational texts, product wrappers, and displays) through a purposeful arrangement of images and/or text and develop a strategic product presentation both independently and as a collaborative team. The course focuses on advanced computer generated designs as well as the use of various software and hardware with an emphasis on students creating, producing, responding and connecting on/in visual art and new media. An in-depth independent study of career opportunities in media art is completed. Contemporary, cultural, and historical design may be studied

MEDIA ARTS INTERNSHIP (12) Prerequisite: Approval of IT Academy Counselor

See description on page 36.

MEDIA ARTS CO-OP (12)

Prerequisite: Approval of IT Academy Counselor See description on page 36.

IMD 115 (10-12) Dual credit with BCTC for Adobe Illustrator.

YEARBOOK 2 (11-12)

ADV. YEARBOOK 3 (12) Prerequisite: Intro to Media Arts OR Journalism 1, and Yearbook 1, and Yearbook 2

IT Academy Additional Electives IT ADVANCED TECHNICAL ASSISTANT (1, 2, or 3) (10-12) Prerequisite: approval from IT Academy school counselor

This course will allow skilled students to serve as technology assistants throughout the school. These students will be given tasks and asked to perform basic troubleshooting and problem solving skills for a variety of technology issues that arise in a working environment. The technology resource teacher and school technician will serve as mentors and guides through this

Credit: 1-3

Credit: 1

Credit: 1-3

Credit: 1

ADVANCED PHOTOGRAPHY 2 (11, 12)

Prerequisites: Digital Imaging, and teacher's signature

Students are required to have their own DSLR camera. Video equipment, lighting, and digital technology are covered by the class fee. Advanced Photography 2 students will investigate a variety of different photo media and technology. Students will investigate and experiment with alternative digital digital programs, video media, and conceptual design. Students are required to present their works to a larger audience than the school itself. Students are required to enter works into juried competitions and gallery spaces to present and archive their work to the larger area community. Concept and artistic intent art strongly emphasized in this course.

THE ACADEMY OF LEADERSHIP & PROFESSIONAL SERVICES Culinary and Food Services Pathway

FOODS & NUTRITION (9-12)

Students in this course will begin their experience in the ProStart Restaurant and Hospitality management curriculum. This program is designed to develop the foundational student skills in becoming a future professional in the Culinary industry. Laboratory instruction is included as an application process. Practical problems addressed relate to attitudes toward food, nutrition facts, preparation skills, and careers in the Hospitality industry. A variety of cooking techniques, demonstrations, and foods lab experiences will be provided. Topics will include safety and sanitation, professional knife skills, cooking methods, stocks, soups, and sauces, basic baking applications, and professional expectations in the Culinary industry.

ADVANCED FOODS AND NUTRITION (10-12)

Prerequisite: Students in Culinary Pathway who have passed Foods and Nutrition This course is a continuation of Foods & Nutrition designed to assist students in principles related to food preparation. Students will continue their progress in the ProStart curriculum for Culinary Management. Students will assess Level 1 of the ProStart Curriculum towards their Culinary Industry Certification. Content includes careers in dietetics and hospitality; safety and sanitation; food and menu planning; cooking methods and baking applications; and local, regional, and global cuisines. Lab instruction emphasizes the application process. Leadership development will be provided through the Family, Career, and Community Leaders of America student organization.

CULINARY 1 (10-12)

Prerequisites: Students in the Culinary Pathway who have passed Foods & Nutrition S1 & S2 This advanced course allows students to increase competencies in restaurant management and food preparation skills to prepare for a career in the Hospitality and Food Service Industry. Emphasis will be placed on food presentation, garnishing, menu planning, and the skills necessary to prepare for a career in the culinary arts. Students will participate in a real-world entrepreneurship business through the student led coffee shop for teachers The Northside Brew. Students will also be able to participate in the Management portion of the ProStart state competition. Leadership development will be provided through the Family, Career, and Community Leaders of America.

CULINARY 2 (11-12) (Bryan Station OR Southside Technical School) Credit: 1 (2B, S1) Prerequisites: Foods & Nutrition, and Culinary 1

In this course, students resume progress in pursuing competencies in food production and services and complete their progress in the ProStart Management Curriculum. Orientation to the food service industry and development of food preparation skills are reinforced. Food service management functions are introduced. More in-depth information is provided and higher levels of skills are taught. Time is provided for work-based learning opportunities through the Defender Cafe. Food preparation; bakery operation; dinner catering; model restaurant; laws and regulations; unions; safety, sanitation; and receiving, storing, and issuing food are addressed. Students will be

Credit: 1

Credit: 1

Credit: 1

able to participate in the Culinary portion of the ProStart state competition for scholarship opportunities and recognition. Leadership development will be provided through the Family, Career, and Community Leaders of America.

CULINARY ARTS INTERNSHIP (12)

Prerequisites: Foods and Nutrition, Culinary 1 and Culinary 2

Internships provide supervised work-site experience for high school students enrolled in a capstone course associated with their identified career pathway. Internship experiences consist of a combination of classroom instruction and field experiences. Students will be placed with a chef in a local top end restaurant or hotel to gain experience, references, and opportunities to move directly into a professional career post-high school. This is a unique opportunity to build a relationship with a culinary professional and demonstrate the sets of skills that the program has built in our students during their time in the pathway.

Management/Entrepreneurship Pathway COMPUTER LITERACY (9)

Refer to page 35 for course description.

INTRO TO MANAGEMENT (10-12)

This course emphasizes the skills needed for managing a business that involves the selection and supervision of employees, including efficient use of time, personnel, facilities, and financial resources. Students will explore forms of business ownership; typical business organizational structure; product or service promotion in business; effective communications; human relations skills required in dealing with employees; and effective management strategies used in personnel, finance, production, marketing, and information processing. Leadership development will be provided through the Future Business Leaders of America and/or DECA.

PRINCIPLES OF MARKETING (10-12)

This is a project based course that provides a basic foundation for further study in marketing. Students study economic functions at work in the marketplace and marketing functions including purchasing, pricing, and distribution functions. This course is based on the business and marketing core that includes communication skills, economics, financial analysis, and promotion. Both marketing and employment skills learned will improve and increase the chance of successful transition into the world of work. Leadership development will be provided through DECA/FBLA activities and competitive events.

ENTREPRENEURSHIP (11, 12)

Prerequisite: Principles of Marketing or Business Management

This course is designed to provide students the skills needed to effectively organize, develop, create, and manage their own business. This course is based on the business and marketing core that includes communication skills, economics, financial analysis, operations, promotion, and selling. The culminating project of the course is the development of a comprehensive business plan and operations of the school store. Students will apply learned business skills and gain invaluable experience by working at the school store. Cooperative education or shadowing experiences may be used to enhance course instruction. Leadership development will be provided through the Future Business Leaders of America and/or DECA.

BUSINESS CO-OP (12)

Prerequisite: Principles of Marketing and Business Management

The objective of this course is to allow students to experience an on-the-job environment while earning high school elective credits. They will apply the skills learned in the management/entrepreneurship pathway to their work experience. In addition to work based learning, students will be provided with instruction in class on business issues in the workplace, personal finance, computerized business applications, Business communication, and career development skills. The course content includes the following areas: Employability, Professional Development, Communication, Personal Finance, Google Suite, Microsoft Office Outlook,

Credit: 1 (2B, S2)

Credit: 1 Credit: 1

Credit: 1

Credit: 1

Credits: Up to 1.5

Service Learning and Management.

WORK BASED REQUIREMENTS: You must be presently working and continue to work in Co-Op position to stay in the program. If you are terminated from your position, you will be removed from the Co-Op class if you do not find employment again within two weeks of leaving your job. Before you quit a job to go work at another job, make sure you have started working at the new work station (earning hours) before you quit your old job.

CREDITS FOR COURSE: You can earn 1.5 credits each semester if you work 270 hours and up each semester. This means that you can earn 3 total credits for the entire year (1.5 - 1st semester) for 270 hours and another 1.5 credits for semester 2 [270 hours] = 3 total. If you earn 1.5 credits for the semester, you will earn 3 letter grades for the course. Your grade will be calculated as such: .5 – for taking and passing Co-Op course (letter grade)

.5 - for working 135 - 269 hours (employment credit)

.5 - for working over 270 (additional employment credit)

Additional Electives

EXPERIENCE-BASED CAREER EDUCATION (12) Note: Application Required

Academic Internships through EBCE is a program designed to utilize the entire community as a classroom. Seniors are provided opportunities to observe, study, and apply academic skills in a variety of businesses and industries, as well as public and private agencies, in this year-long shadowing/internship/mentoring program. Learning is accomplished through carefully planned activities that combine academic learning, decision-making skills, and career awareness. Examples of student placements include: banking, finance, accounting, law and court administration, broadcasting, counseling/psychology, culinary arts, performing arts, education, engineering, architecture, fitness and sports administration, marketing, advertising, graphic arts, media relations, medicine, pharmacy, dentistry, nursing, technology and veterinary science.

SCHOOL STORE MANAGER (11-12)

Note: Teacher permission is required

This store is designed for students in the Management/Entrepreneurship pathway. This class will enhance the student's knowledge of management, marketing, finance and operations by applying learned skills to running and managing the school store.

PRINCIPLES OF HOSPITALITY (9th-10th)

This course is designed for students interested in business and marketing careers in the hospitality industry. The instruction includes career awareness in the areas of recreation, travel/tourism, hotel/motel, and restaurant. This course is based on the business and marketing core that includes communication skills, economics, operations, promotion, selling, and product/service management. Leadership development will be provided through DECA and/or FBLA.

Teaching & Learning Pathway

LEARNING COMMUNITY (10) (Regular or Dual Credit 201)

In this course students develop an understanding of the various responsibilities and systems involved in the K-12 educational system. Specifically, students will acquire the knowledge of education through the perspectives of classroom, school, district, state, and federal roles.

PROFESSIONAL EDUCATOR (11) (Regular or Dual Credit 215)

In this course students will develop an understanding of how educators advance their profession within the classroom. Specifically, students will gain both the knowledge and skills to plan, deliver, and reflect on the process of teaching and learning.

THE LEARNER CENTERED CLASSROOM (11-12) (Regular or Dual Credit 107) Credit: 1

This course will develop rising educators' awareness of their funds of knowledge, as well as their personal biases that develop from their life experiences. Using research-based methods, rising

Credit: 1

Credits: 2

Credit: 1

educators will develop methods to impact student equity based on culturally competent models as well as growth mindset methods.

COLLABORATIVE CLINICAL EXPERIENCE (12)

Students will refine the required knowledge and skills to be an effective educator while also practicing the dispositions necessary for the educational profession. Specifically, students will gain an understanding of how teachers lead through individual and collaborative growth and reflection. Students participate in clinical experiences. This is a work-based learning experience where students should spend almost all of their time in a classroom learning setting appropriate to their intended teaching discipline.

ACADEMY OF MEDICAL SCIENCES AND HUMAN SERVICES Pre-Nursing Pathway

PRINCIPLES OF HEALTH SCIENCE (9-11)

This course is an orientation to the health care clusters. It is also designed to develop and enhance an understanding of the roles and responsibilities of each career major area. Communication, study, and leadership skills will be emphasized as the student learns about the healthcare industry, health care economics, and career opportunities available. Medical Terminology and Anatomy and Physiology will be integrated throughout the course. Upon successful completion of this course, the student will be able to focus on a career major path and make informed decisions regarding choices for continuing education and/or employment.

EMERGENCY PROCEDURES FOR HEALTH CARE PROF. (10-12)Credit: ½ (S2)Prerequisite: Minimum C avg. in Principles of Health ScienceCredit: ½ (S2)

Emergency Procedures is designed to teach cardiopulmonary resuscitation (Adult/Infant/Child) using current emergency techniques relative to cardiac and/or respiratory arrest, as put forth by the American Heart Association, and qualifies a student for certification of cardiopulmonary resuscitation and safety and first aid. Safety and First Aid is a course designed to teach current strategies relative to designated emergency situations as put forth by the American Heart Association.

MEDICAL TERMINOLOGY (10-12)

Prerequisite: Minimum C avg. in Principles of Health Science

This course is an intense study of medical language. Medical Terminology provides an overview of the basic techniques of medical word building. Once these techniques have been developed, they can readily be applied to acquire an extensive medical vocabulary. Emphasis is on basic anatomical, physiological, pathological, diagnostic procedural, and pharmacological terms. The language includes terms used by those employed in all healthcare career areas. Emphasis is on correct pronunciation, spelling, and application. Medical Terminology includes reading, writing and oral presentation exercises, research, and connection to medical science.

ADV. HUMAN ANATOMY & PHYSIOLOGY or GENERAL ANATOMY (10-12) Credit: 1 Refer to page Science department section for course description.

MEDICAID NURSE AIDE (12, 11 may take S2) Credits: 1 (2BL either S1 or S2) Prerequisites: Minimum C Avg. Medical Term & EP, concurrent enrollment or completion of Adv. Human Anatomy, Application Required

The Nurse Aide Training and Competency Evaluation program is designed to provide both classroom instruction and clinical practice that will assist the student in gaining knowledge and skills essential to the provisions of nurse aide services. <u>Students must exhibit acceptable industry</u> <u>behaviors in the whole school environment in order to participate in WBL opportunities.</u> Students in this class <u>must</u> take the Certified Nursing Assistant examination at the end of the semester. The

Credits: 2

Credit: 1

Credit: 1/2 (S1)

NURSING COOPERATIVE (12)

Prerequisite: Medicaid Nurse Aide Certification

Cooperative education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the cooperative education program receive compensation for their work. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings. These may include but are not limited to: drug screenings, TB skin test, and immunization certificate

Allied Health Pathway

Refer to the Pre-Nursing pathway for the first three course descriptions. ***PRINCIPLES OF HEALTH SCIENCE (9-11)**

*EMERGENCY PROCEDURES/HEALTH CARE PROFESSIONALS(10-12) Credit: ½ S2 Prerequisite: Minimum C avg. in Principles of Health Science

*MEDICAL TERMINOLOGY 1 (10-12) Prerequisite: Minimum C avg. in Principles of Health Science

ADV. HUMAN ANATOMY & PHYSIOLOGY or GENERAL ANATOMY (10-12) Credit: 1 *See Science Department electives for course description. Credit: 1

ALLIED HEALTH CORE SKILLS (12)

Prerequisites: Minimum C Avg. Medical Term & EP, concurrent enrollment or completion of Adv. Human Anatomy

Allied Health Core Skills is designed to provide knowledge, concepts and psychomotor skills necessary for gainful employment as an entry-level health care worker. Assisting students in selecting a career major, classroom instruction and educational objectives are combined with learning experiences, observations, and a work-based learning opportunity such as internship. shadowing, or clinical rotation. Students must exhibit acceptable industry behaviors in the whole school environment in order to participate in WBL opportunities. This course is designed for students not enrolled in the Medicaid Nurse Aide program.

INTERNSHIP: ALLIED HEALTH (12)

Prerequisites: Earning a "C" or better in Allied Health Core Skills and instructor recommendation

The internship provides supervised on-the-job work experience related to the students' education objectives. Work-based learning is designed to complement the classroom instruction. Students will be required to follow program and agency requirements for attendance and health screenings. These may include but are not limited to: drug screenings, TB skin test, and immunization certificates

Pharmacy Technician Pathway

Refer to the Pre-Nursing pathway for the first three course descriptions. ***PRINCIPLES OF HEALTH SCIENCE (9-11)**

*EMERGENCY PROCEDURES/HEALTH CARE PROFESSIONALS (10-12) Credit: ½ S2 Prerequisite: Minimum C avg. in Principles of Health Science

*MEDICAL TERMINOLOGY 1 (10-12) Prerequisite: Minimum C avg. in

ADV. HUMAN ANATOMY & PHYSIOLOGY or GENERAL ANATOMY (10-12) Credit: 1 *See Science Department electives for course description.

Credit: 1

Credit: 1/2 (S1)

Credit: 1

Credit: 1/2 (S1)

Credit: 1/2 to 1

PHARMACY TECHNICIAN 170558 (12)

Prerequisites: Minimum C Avg. Medical Term & EP, concurrent enrollment or completion of Adv. Human Anatomy, Application Required

This course may be completed as an independent study or as a classroom course during the student's senior year. Material covered will include: Orientation, Federal Law, Medication Review, Aseptic Techniques, Calculations, and Pharmacy Operations. It is best practice for students to participate in a work based learning experience at a pharmacy during this course. Students will be required to follow program and agency requirements for attendance and health screenings during the work based learning experience. These may include but are not limited to: drug screens, TB skin test, and Immunization certificates. Students must exhibit acceptable industry behaviors in the whole school environment in order to participate in WBL opportunities. Upon completion of this course, students are eligible to take the Pharmacy Technician certification examination in order to obtain national certification. Options for the national certification examination include either the ExCPT/CPhT or the PTCB exam.

FRESHMAN ACADEMY

FRESHMAN SEMINAR (Required 9)

Freshman Seminar is designed to successfully transition students from middle school to high school. Students enrolled in this course will be given strategies for effective time management, study skills, goal setting, organizational techniques, communication skills, and technological skills that will aid them on their path to graduation. Additionally, students will embark on a self-discovery mission to uncover personal values, goals, and attributes that will shape decisions when choosing a career academy for the tenth grade. Each student will conduct career and college research to facilitate their career plan. Students will fill out applications, create resumes, participate in interviews, and attend a career fair to allow them to anticipate the requirements and necessities for success in their desired field

Credit: 1