



# High School Course Planning Guide

2019-2020

# My Course Planner

This page is designed to help you plan the courses you would like to take next school year; however, it is not the actual registration form. Some things you need to consider and remember:

- You must register for a total of 7 credits (for the school year) and you must select a total of 2 alternate credits
- Your English, Math and Science teachers must approve the class you will take in their subject area next year, and some Social Studies classes also require instructor approval.

Department	Semester		Semester	
	Course Name	Course #	Course Name	Course #
English Language Arts				
Math				
Science				
Social Studies				
PE				
Elective				
Elective				
Alternate				
Alternate				

Notes

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# Wentzville School District

## High School Courses

### ***ACT Preparation***

#### **ACT PREPARATION COURSE (Course #H1116)**

GRADES 11, 12

One Semester – ½ credit\*

Recommendation: Algebra I and Geometry

This eLearning ACT Prep course is designed to help students prepare for the standard ACT exam in the areas of math and English language arts (including writing). \*This course may also be taken as independent study. The independent study course is one semester and non-credit bearing. Counselor approval is needed.

### ***AP Capstone Program***

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic paper. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option.

### **AP Seminar (Course #H1020)**

GRADES 11, 12

Two Semesters – 1 credit

\*Weighted Course

AP 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.

### **AP Research (Course #H1015)**

GRADE 12

Two Semesters – 1 credit

\*Weighted Course

Prerequisite: Successful completion of AP Seminar

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

## ***Art***

### **ART FUNDAMENTALS (Course #H6002)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

This course introduces students to art appreciation through aesthetics, history, criticism and production. This course provides students the basic skills they need to analyze works of art and the minimal skills they will need to take all other courses in the Art Department. Students will work in two-dimensional and three-dimensional media incorporating the elements and principles of art.

### **DRAWING (Course #H6030)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Art Fundamentals

This course offers concentrated study of drawing from observation. Students will explore elements and techniques of drawing with graphite, colored pencil, charcoal, and ink. Students will experiment with varied subjects as forms for expression including still life and the human figure.

### **PAINTING (Course #H6040)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Art Fundamentals

This course will offer concentrated study in drawing and painting. Students will explore techniques of painting with watercolor, acrylics and oils. Students will experiment with varied subjects as forms for expression including still life and will learn about a variety of painting styles. Good attendance is important to success in class.

### **SCULPTURE I (Course #H6050)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Art Fundamentals

This course will offer concentrated study in three-dimensional art production involving materials such as wood, plaster, clay and wire. Good attendance is important to success in class.

### **SCULPTURE II (Course #H6051)**

GRADES 10, 11, 12

One semester - 1/2 credit

Prerequisite: Sculpture

This course will offer concentrated study in three-dimensional art production involving materials such as wood, plaster, clay, glass and wire. Students will apply skills learned in Sculpture I to do more technically difficult projects to build a portfolio.

### **CERAMICS I (Course #H6011)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Art Fundamentals

This course will explore the use of clay as an art form. Students will learn the basic construction techniques of pinch, coil, slab and wheel throwing. They will encounter all phases of pottery production from design through firing and glazing.

## **CERAMICS II (Course #H6012)**

GRADES 10, 11, 12

One semester - 1/2 credit

Prerequisite: Ceramics

This course will offer concentrated study in ceramic art. Students will apply skills learned in Ceramics I to do more technically difficult projects to build a portfolio.

## **DIGITAL PHOTOGRAPHY (Course #H6014)**

GRADES 10, 11, 12

One Semester- 1/2 credit

Prerequisite: Art Fundamentals

Digital Photography students will learn the basics of how to use a DSLR camera. Students will learn how to compose and manipulate an image through the camera viewfinder and photo editing software. Emphasis is placed on an artistic approach to photography; this includes what to look for in a photograph and how to create good composition. The students will also learn the history of photography and research notable photographers. Good attendance is important to success in class.

## **GRAPHIC DESIGN I (Course #H6021)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Art Fundamentals

In this course, students will explore the principles of design and the world of advertising art. They will experiment with varied media as a means of graphic communication that may include computer graphics, airbrush, ad layout, or printmaking. Attention to deadlines and good attendance are important to success in class.

## **GRAPHIC DESIGN II (Course #H6022)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Graphic Design I

In this course, students will create a portfolio using the principles of design and produce viable works for the world of advertising art. They will focus their concentration using various media as a means of graphic communication that may include computer graphics, airbrush, ad layout, or printmaking. Attention to deadlines and good attendance are important to success in class.

### **AP ART HISTORY (Course #H6065)**

GRADES 10, 11, 12

Two Semester – 1 credit

\*Weighted Course

The AP Art History course explores such topics as the nature of art, its uses, its meanings, art making and responses to art. Through investigation of diverse artistic traditions of cultures from prehistory to the present, the course fosters in-depth and holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual and comparative analysis to engage with a variety of art forms, constructing understanding of individual works, and interconnections of art making processes and products throughout history. AP Art History is designed to be the equivalent of a two-semester college or university art history survey course. Upon completion of this course students may elect to take the AP Art History Exam.

### **ADVANCED STUDIO ART (Course #H6024)**

GRADES 11, 12

Two semesters – 1 credit

Prerequisite: Two full credits of Art (B average in each is recommended) and teacher recommendation

Advanced Studio Art is the precursor to AP Studio Art. Students who take this course have a serious interest in furthering the development of their skills art. In this course, students will choose one area of focus (2-D Design, 3-D Design or Drawing) for the year. Students will refine their skills in this area and develop a portfolio to showcase those skills. It is expected that students in the Advanced Studio Art course will continue on to AP Studio Art the following year.

### **AP STUDIO ART (Course #H6025)**

GRADES 11, 12

Two Semesters - 1 credit

Prerequisite: Advanced Studio Art (B average recommended) and Teacher recommendation \*Weighted Course

AP Studio Art is designed for students who are seriously interested in the practical experience of art. The course encourages creative and systematic investigation of formal and conceptual issues, and it emphasizes making art as an ongoing process that involves critical decision making. The course helps students develop technical skill and will familiarize them with function of the visual elements. AP Studio Art encourages students to become independent thinkers who will contribute inventively and critically to their culture through the making of art. This course is not based upon a written exam; rather, students submit portfolios for evaluation. Students will submit a portfolio in at least one of the following areas: 2-D Design, 3-D Design, and Drawing. Students are strongly encouraged (since the course is not based upon a written exam) submit their portfolio(s) to AP for evaluation.

# *Business Education*

The Business Education courses offered at High Schools in the Wentzville School District fulfill the student's practical art credit for graduation. While much of today's emphasis is on technology and equipment, we strive to maintain up to date standards for the student's needs. However, we must not forget that essential introductory skills learned in a well-planned schedule will enable the student to acquire not only the basics but also apply these skills to advanced level courses in preparation for the job market or college. All courses utilize computers. The department is a networked PC environment with the Microsoft Office Suite as well as course-specific software. Students must have the District Technology Users' contract on file in the Library in order to enroll in a business course. All Business Students are encouraged to join FBLA, a business student organization.

## **ACCOUNTING (Course #H6150)**

GRADES 10, 11, 12

Two Semesters – 1 credit

Accounting introduces students to financial information needed in all business-related occupations. Students understand the accounting cycle as they record earnings and expenses related to one-owner businesses, partnerships, and corporations, as well as prepare financial statements, payroll, and various tax forms. For students who will pursue entrepreneurial ventures and business ownership, this course develops the skills necessary to solve business problems and make financial decisions. For those students who plan to pursue a degree in Accounting or a business related field, Accounting provides students with a foundation to support future advanced coursework.

## **ADVANCED ACCOUNTING (Course #H6155)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Accounting

\*Weighted Course

This second year Accounting course is highly recommended for students interested in pursuing a degree in Accounting or Business. They are introduced to real life simulations and more complex topics to solve business problems and make financial decisions. This course will give students a strong foundation for their first postsecondary Accounting course.



## **PERSONAL FINANCE (Course #H6171)**

GRADES 11, 12

One Semester - 1/2 Credit

\*Required for graduation

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

## **BUSINESS & PERSONAL LAW (Course #H6170)**

GRADES 11, 12 One Semester – 1/2 credit

This one-semester course introduces the student to the basic principles of law and its effect on the relationship between business organizations and consumers. Basic topics will include the legal system and laws regarding contracts, credit and lending, hiring and firing, rental/ownership of property, and estate planning. The Internet is used to access consumer information and case studies.

## **BUSINESS TECHNOLOGY (Course #H6182)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Explore the world of business and become advanced users of technology including Microsoft Office, Google Drive and other online applications. This course is designed to develop the knowledge, and skills required for the Microsoft Office Specialist (MOS) certification tests. This technology class is critical for college and workplace readiness. Students will learn how to make technology work for them and help them excel in their courses in high school, college, and careers. Technology will be utilized to solve problems and complete tasks efficiently and effectively regardless of previous experience with technology. Students participate in simulations with real word experiences such as event planning, project management, data analysis, social media etiquette, and variety of presentations to enhance all forms of effective communication. Students get an in depth knowledge of advanced word processing, spreadsheets, database management, presentations, and desktop publishing. Other technology concepts are explored including but not limited to web design, email communication, Internet and social media etiquette. In addition to satisfying the practical art requirement for graduation, this course is the prerequisite for many other technology courses and appropriate for all grade levels.

## **COMPUTER SCIENCE PRINCIPLES (Course #H1060)**

GRADES 9, 10, 11, 12

Two semesters- 1 credit

Recommendation: Successful completion of Introduction to Computer Science (ICS) for 9th grade students

\*Weighted Course

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, robotics, and simulation. This course aligns with the AP Computer Science Principles course. This is a Project Lead the Way (PLTW) course.

## **AP COMPUTER SCIENCE A (Course #1062)**

GRADES 10, 11, 12

Two semesters – 1 credit

Prerequisite: Computer Science Principles or Computer Programming

\*Weighted Course

Computer science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science A course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science. Students who take the AP Computer Science A course and exam are well prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields.

## **DESKTOP PUBLISHING I (Course #H6131)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Business Technology or Computer Applications I

Students will explore and become proficient users of graphic arts/desktop publishing software to produce creative and effective business documents such as promotional items, newsletters, brochures, etc. In this course, students will utilize Adobe InDesign, Illustrator and Photoshop. An emphasis will be placed on editing photos, working with text and colors, adjusting and filtering images, and creating professional quality documents.

## **DESKTOP PUBLISHING II (Course #H6132)**

Grades 10, 11, 12

One semester-1/2 credit

Prerequisite: Desktop Publishing I

A computerized course designed to prepare students for advanced coursework that can be applied to college and the workplace for employment in career areas which include graphic arts/desktop publishing skills. Demand in these areas is rising as businesses utilize advanced graphic arts skills to increase their production efficiency and improve the creativity and quality of business documents and publications. Students will become advanced users of Adobe Illustrator, Photoshop, InDesign and be introduced to a variety of other Adobe products including Premiere, Fireworks, and Acrobat. Skills will be attained to design and edit computer graphics and images as well as concentrate on graphic manipulation and photo editing.

## **MULTIMEDIA (Course #H6130)**

GRADES 10, 11, 12

Two Semesters - 1 Credit

Prerequisite: Business Technology or Computer Applications I

This two-semester course addresses the technology knowledge and skills required of students entering the workplace. The demand will continue to expand as businesses utilize multimedia functions including graphics, audio, video, web page design and maintenance, and electronic presentation skills. Students will work individually and in team situations. Students will be exposed to Adobe Photoshop, Soundbooth, Premiere Pro, and Dreamweaver.

## **BROADCAST MEDIA (Course #H6135)**

Grades 10, 11, 12

Two Semesters - 1 Credit

Prerequisites: Introduction to Journalism, Multimedia (may be enrolled concurrently in Multimedia) or Teacher Recommendation

Note: This course can be taken more than once.

Explore the world of audio/visual storytelling in an authentic, journalistic based, studio environment! Broadcast media allows students to pursue their interests in behind the scenes and/or in on screen experiences for various audiences in the school, across the district, and throughout the community. Experiences in this class may include (but will not be limited to) script writing, storyboarding, filming, editing, and promoting content.

## **WEB DESIGN (Course #H6133)**

GRADES 11, 12

One Semester - 1/2 Credit

Prerequisite: Multimedia

In this one-semester web design course, students complete several guided projects and then develop their own website. Web design essentials are covered throughout in examples and activities. Students will plan a website and move into storyboarding, page design, layout and template issues. From there, students learn to create backgrounds, headers, and buttons. Students learn to use templates, create rollovers and pop-ups, develop

image maps, and add animations. Students will be exposed to Adobe Fireworks, Dreamweaver and Flash. Students will gain hands-on experience with real-world websites.

### **ADVANCED BUSINESS TECHNOLOGY (Course #H6185)**

GRADE 12 Two Semesters – 1 credit

Prerequisite: Desktop Publishing II

This two-semester course is a continuation of Business Technology to refine work processing and office skills needed for an entry-level job and/or continuation into advanced college courses needing work processing skills. Desktop publishing is extensively covered.

### **BUSINESS AND OFFICE INTERNSHIP (Course #H6140)**

GRADES 11, 12

Two Semesters – 1/2 to 1 credit (depending upon number of hours worked)

Prerequisite: Instructor approval and 2.0 GPA or higher \*Must also be enrolled in in one of the following: Accounting, Business Technology, Advanced Business Technology, Multimedia, Desktop Publishing I or II or Web Design Students earn high school credit while being trained on-the-job. Students must provide own transportation to and from work.

Students earn 1/2 credit per semester for working 10 hours per week or 1 credit for over 20 hours per week. Students may not change jobs without teacher approval. If a student loses a job, the following formula will be used to calculate a final grade: Number of hours the student worked divided by 180 (hours for 1/2 credit) or 360 (hours for one credit) plus percentage grade earned divided by 2.

### **COMPUTER HARDWARE & INFORMATION TECHNOLOGY (Course #H6160)**

GRADES 11, 12

Two semesters – 1 credit

Prerequisite: Any high school technology course, Lewis & Clark course, or PLTW Computer Science/Engineering course

\*An application is required for admittance into this course.

In this course students will learn and perform the skills of a computer technician for the high school. Students will be required to assess computer hardware and software problems and define the best approach to addressing or solving the problem. In addition to solving problems for their classmates and teachers, students will be required to complete and maintain inventory and tracking of work orders. Students will pursue CompTIA A+ certification in a self-paced environment or complete school based technology projects. Acquiring customer service skills will be emphasized.

# *English Language Arts*

The English program is designed to prepare all students to be college and career ready. Essential to the overall program of studies, the English program emphasizes the development of the powers of comprehension, of critical thinking skills, and of coherence, cogency, and fluency in the expression and communication of ideas. The ultimate goal of the English Language Arts program in the Wentzville School District is for students to glean the following enduring understandings:

- The integration of knowledge and collaboration help us solve problems.
- Intentionally choosing and utilizing appropriate resources is essential to personal and professional growth.
- Effective communication is necessary for life.
- Reading and writing enhance our quality of life and expand our understanding of our global society.
- It is important to provide evidence to support our thinking and to consider the evidence of others.
- Perseverance and personal integrity are essential to success.
- Good digital citizens use technology effectively and ethically.

## **READING WORKSHOP (Course #H1102)**

GRADE 9, 10, 11, 12

Two Semesters - 2 credits (This is a 2-period class)

(1 credit counts as an ELA requirement for graduation and 1 credit counts as an ELA Elective)

Prerequisite: English teacher recommendation

This course is a basic English course stressing reading and writing. Students practice basic reading skills of comprehension through an individualized Reading Program, in which students read companion sets of fiction and nonfiction pieces. The elemental skills of sentence and paragraph development are reviewed. The writing process is reviewed, practiced and reinforced. Emphasis on basic writing mechanics, grammar, and syntax is generously employed. Vocabulary concept development is generated through study of literature. The course reviews the elements and characteristics of fiction and nonfiction. Students will also use basic research skills to develop a research project. Upon successful completion of this course, students will be prepared to enter English I in the next academic year.

## **READING ENRICHMENT (Course #H1104)**

GRADE 9, 10, 11, 12

Two Semesters – 1 credit

\*This course is an elective and will not count towards fulfillment of the English Language Arts requirement for graduation.

Prerequisite – English teacher recommendation

This course is designed for students who have been in READ 180 at the middle school level and/or who have been in Reading Workshop in high school. The purpose of this course is to help students maintain reading and academic confidence. Students who are enrolled in Reading Enrichment likely will be simultaneously enrolled in English I.

**ENGLISH I (Course #H1110)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Students enrolled in English I actively engage in reading, writing, speaking and collaborating through a variety of units of study. During themed units of study, students analyze and cite a variety of text(s) to determine the development of central ideas through refined supporting details, develop and support claims, organize complex ideas and form original argumentative works. Additionally, students examine how authors use structure, literary devices and rhetorical devices to convey meanings and make relevant and powerful statements. In response to reading and in forming their own claims, students develop refined writing skills as they learn how, when and where to revise their own pieces. Upon completion of this course, students will be required to take the Missouri End-Of-Course exam for English I.

**ADVANCED ENGLISH I (Course #H1113)**

GRADE 9

Two Semesters - 1 credit

Prerequisite: English teacher recommendation

Recommendation: "A" average in 8th Grade English Language Arts class

\*Not a weighted course

Students enrolled in Advanced English I begin building a strong foundation in analysis of literature and in writing that will be required in AP English courses. Advanced English I is an intensive study of literature and writing, thus, students should expect to spend time reading and writing both inside and outside of the classroom. In addition to the requirements of English I, it will involve a more rigorous study of grammar, essay writing, literary analysis, and vocabulary. Through more in-depth literary analysis of poetry, short fiction, novels, and nonfiction, students will refine abstract and critical thought processes. More time will be necessary outside of class to complete projects and research papers. Upon completion of this course, students will be required to take the Missouri End-Of-Course exam for English I.

**ENGLISH II (Course #H1120)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: English I or Advanced English I

English II students in Wentzville School District actively participate in the processes of reading, writing, speaking and listening. Students use independent reading strategies to analyze fiction and nonfiction. Students engage in a variety of writing genres in a variety of settings both teacher directed and self-directed. Additionally, students apply research skills to support their own ideas and claims. Within a collaborative environment, students make connections, re-evaluate their own ideas and reinforce or formulate new perspectives. Students will be required to take the Missouri End-Of-Course exam upon completion of this course.

## **ADVANCED ENGLISH II (Course #H1123)**

GRADE 10

Two Semesters - 1 credit

Prerequisite: Teacher Recommendation

Recommendation: "B" average in Advanced English I or "A" in English I

\*Not a weighted course

Students enrolled in Advanced English II continue building the strong foundation in analysis of literature and in writing that will be required in AP English courses. Advanced English II offers students an intensive study of writing and literature in preparation for advanced coursework. In addition to the study and mastery of English II concepts, it requires students to complete multiple research projects, numerous writing assignments, and oral presentations. Students will increase their vocabulary while reading several novels independently and they will continue to analyze and apply rhetorical strategies to their own writing. Upon completion of this course, students will be required to take the Missouri End-Of-Course exam for English II.

## **ENGLISH III (Course #H1130)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: English II or Advanced English II

Students enrolled in English III will be actively engaged in reading, writing, speaking, and listening within four units throughout the course. Each unit includes the reading of American novels, short stories, and informational text to support the goals of the unit. Students write for a variety of purposes including argumentative, informational, and narrative writing in formal and informal styles. Students engage in the complete writing process throughout the course, and they initiate and participate effectively in a range of collaborative discussions focusing on the themed units. Students continue to demonstrate their command and usage of the English language.

## **AP ENGLISH LANGUAGE AND COMPOSITION (Course #H1133)**

GRADE 11

Two semesters - 1 credit

Prerequisite: Teacher Recommendation

Recommendation: "B" average in Advanced English II or "A" in English II

\*Weighted Course

Students enrolled in AP Language and Composition will be required to look critically at the purpose and writing features within various forms of communication from writers of different periods, disciplines, and rhetorical perspectives. As the English language is rich and powerful, students in this class will have opportunities to study and manipulate language by exploring their own writing styles for various purposes through diverse writing prompts and essays. This rigorous course requires a high level of commitment in and out of the classroom, including a summer reading and writing assignment. Course syllabi are written by individual teachers of a course and approved by the College Board. Students are encouraged to take the AP Language and Composition test at the end of the course.

## **ENGLISH IV (Course #H1140)**

GRADE 12

Two Semesters - 1 credit

Prerequisite: English III or AP English Language and Composition.

Recommendation: Minimum "C" average in English III

Students taking English IV will be exposed to several units (ranging from Cultural Heroes, to the nature of Truth, and Ambition) in which different modes of writing and reading will be studied and applied; both informational and literary texts will be the primary focus of this course. The focus of readings will remain varied in both the world views expressed, along with the difficulty of texts. Additionally, students will also incorporate technology and research to write and express their ideas in a variety of formats. Designed as a mature study of English, students completing this course will gain necessary skills needed for being college and career ready.

## **AP ENGLISH LITERATURE AND COMPOSITION (Course #H1141)**

GRADE 12

Two Semesters - 1 credit

Prerequisite: Teacher recommendation

Recommendation: "B" average in AP English Language and Composition or "A" average in English III

\*Weighted Course

This course is a rigorous study of English, American, and World literature; students are exposed to prose, drama, and poetry during the course of the school year, and also complete numerous writings. Writing in AP Literature and Composition will be of both the shorter timed writing styles as well as longer, extended analyses. Much of the discussion and analysis revolves around style and literary technique as contributing to meaning. Course syllabi are written by individual teachers of a course and approved by the College Board. Students are encouraged to take the AP Literature and Composition test at the end of the course.

## **CONTEMPORARY LITERATURE (Course #H1173)**

GRADES 11, 12

One Semester – ½ credit

Prerequisite: English II or Advanced English II

Recommendation: "C" average in English II or Advanced English II

Contemporary literature is a semester long course that focuses on the literature of the 21st (and possibly late 20th century). Encouraging the exploration of, and responses to, contemporary, high-interest texts from various genres and culture, this course is dedicated to those students who may have struggled to enjoy the more traditional literature of previous English Language Arts courses.



**FILM AS LITERATURE (Course #H1176)**

GRADES 11, 12

One Semester – 1/2 credit

Prerequisite: English II or Advanced English II

Recommendation: “C” average in English II or Advanced English II

In Film as Literature, students will critically view film as its own artistic medium, analyzing a filmmaker’s message, technique, and choices. Students will also read a variety of texts, with an emphasis on film theory and film review. Throughout the course, students will participate in many listening and speaking activities and they will produce several pieces of writing, such as reviews, essays, and project.

**CREATIVE WRITING I: PUBLISHING NARRATION AND POETRY (Course #H1170)**

GRADES 11, 12

One Semester – 1/2 credit

Prerequisite: English II or Advanced English II

Recommendation: “C” average in English II or Advanced English II

Publishing Narration and Poetry is designed to instruct students in narrative writing and poetry writing, with emphasis on the use of literary techniques. Interested students should be prepared to write daily, create original work, engage in peer editing, submit work for contests and publication in multiple sources, and use his/her computer daily.

**CREATIVE WRITING II: SCREENPLAY, NONFICTION AND HISTORICAL FICTION SHORT STORY (Course #H1172)**

GRADES 11, 12

One Semester – 1/2 credit

Prerequisite: English II or Advanced English II

Recommendation: “C” average in English II or Advanced English II

In Screenplay, Nonfiction, and Short Story Writing students will explore and develop historical fiction short stories, creative nonfiction, and scriptwriting. Students will use characterization, plot, theme, setting, tone, mood, dialogue and pacing in writing assignments. Interested students should be prepared to engage in peer editing, submit work for contests and publication in multiple sources, and use his/her computer daily.

**COMMUNICATION: PUBLIC SPEAKING (Course #H1174)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Recommendation: Minimum “C” average in English I

Students will take part in a number of individual and group activities and presentations. This course emphasizes a variety of communication, group interaction, public speaking and performance skills for application in a number of situations. Grades are based on completion and quality of assignments, classroom presentations, and some tests. Most research and preparation may be completed during class. Good attendance is essential for success in this class.

## **ARGUMENTATION AND DEBATE (Course #H1175)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Recommendation: Minimum "C" average in Communication: Public Speaking

\*This course may be available for college credit. Please see your counselor or instructor for details.

This course is designed for students who love to express their ideas in a variety of ways and is built to help students organize their thoughts and debate in a respectful and well researched manner. Students will take part in a number of individual activities, presentations and activities to that focus on organizing ideas and arguments, preparing appropriate materials and presenting themselves in a positive manner. Debate styles, such as Lincoln Douglas, Public Forum, Policy and Congressional, will be practiced in this class. Time will be spent on group interaction techniques, debate techniques, project plans, one-on-one debate of ideas and values, and use of parliamentary procedure. Speaking in front of the class will be frequently required and much of the coursework is dependent on working with groups. Grades for the course are determined from scores on individual work, preparations, debates, participation, and some tests. Good attendance is essential for success in this class.

# *Family and Consumer Sciences*

Family & Consumer Sciences education empowers individuals and families across the lifespan to manage the challenges of living and working in a diverse, global society. Our unique focus is on families, work and their interrelationships. Our goal is to prepare students for family life, work life, and careers by providing opportunities to develop the knowledge, skills, attitudes and behaviors needed to be successful.

## **ARTICULATION AGREEMENT WITH ST. CHARLES COMMUNITY COLLEGE**

Through an agreement with St. Charles Community College it is possible for specific courses in the WHS Family and Consumer Sciences Department to receive college credit. For more specific information please refer to College Articulation Agreement in the guide or contact an instructor in the Family and Consumer Sciences Department.

**High School** (1 sem) + Child Dev. II (1 sem) = **SCC Matching Allowance Child Dev I** Growth & Development 112 (CDC112)

\*\*Credit for CDC 112 (Growth and Development I) will be awarded retroactively after a student has completed CDC 113 (Growth and Development II) with a "C" or better.

The Career and Technical Student Organization (CTSO), Family, Career and Community Leaders of America (FCCLA), is an integral part of the curriculum, providing opportunities to apply instructional competencies and workplace readiness skills, enhancing leadership development skills, and providing opportunities for community service. Students are encouraged to join FCCLA in order to participate in the student-organized projects, meetings, and competitive events, which allow them to have interaction with community members and students from other schools.

## **CHILD DEVELOPMENT I (Course #H6200)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

This course is the first course in a three course sequence leading to technical skills attainment and is also a part of an articulation agreement with St. Charles Community College for students who are interested in pursuing an associate degree in Early Childhood Education. The focus of the course includes the development of the child from conception through preschool age evaluating their physical, intellectual, emotional and social growth. Other units include guidelines for creating safe environments, guidance/discipline techniques, and career exploration. Students participate in a parenting simulation project using "Baby Think it Over" and the Empathy Belly. Grades are determined from class assignments and projects, quizzes, tests, mandatory notebook and homework assignments. Upon completion of the class, students are able to differentiate between the developmental stages of newborn through preschool age. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Careers include: Child Care Provider, Teacher, Pediatrician, Nurse, Doctor, Parent, First Responders, & Social Worker.

## **CHILD DEVELOPMENT II (Course #H6202)**

GRADES 11, 12

One Semester - 1 credit (Two period course)

Prerequisite: "C" average in Child Development I, or by teacher recommendation. Application and references are required for admittance into this course.

\*Weighted course

The Family & Consumer Sciences Department Committee will grant acceptance into this course. Placement in this course is highly selective. Regular attendance is mandatory to complete the laboratory portion of the class successfully. Child Development II is designed for students interested in becoming a teacher, pediatrician, child care provider, dietician, social worker, psychologists, or nurse. This course is the second course in a three course sequence leading to a technical skills attainment and is also a part of an articulation agreement with St. Charles Community College for students who are interested in pursuing an associate degree in Early Childhood Education. This course is a two-period course (taken in one semester) that examines children from age 3 through 5 evaluating their physical, intellectual, emotional and social growth through an onsite playschool program. Units of study include development of the preschool child, ethics in child development careers, developing developmentally appropriate activities, interacting with children, quality child care programs, health concerns at developmental stages, and career exploration. Careers include: Teacher, Child Care Provider, Pediatrician, Nurse, Doctor, Parent, Dietician, Social Worker, and Psychologists.

## **PATHWAYS TO CAREERS IN TEACHING (Course #HH6204)**

Grade 11, 12 One semester - 1 credit (Two Period Course)

Recommendation: Child Development I and II

\*This course may be available for college credit.

\*Weighted course

This class is designed for students who are seriously considering a profession in elementary and/or secondary teaching or as a corporate educator. Each student is assigned to a district school within the high school attendance boundaries. Cadet teachers keep daily logs, weekly journals, prepare and present a lesson(s) and work closely with the students of the assigned supervising teacher. Students demonstrate good moral character, good work habits, responsibility, punctuality, and organizational skills. Participation in FCCLA (Family, Career, Community, Leaders of America) is required. Students will complete the end of course Exam - Industry Recognized Certification (IRC) test - upon completion of this course and Child Development I and II. Careers include: Teaching at all levels.

## **INTRODUCTION TO CLOTHING AND TEXTILES (Course #H6210)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

Intro to Clothing and Textiles is a course designed for the student interested in a career in fashion apparel and textiles. This course is designed for the student who has little or no previous sewing experience. Students learn basic sewing skills and fabric selection knowledge to be applied in a variety of samples and/or projects. Self-initiative, motivation, time management, planning independent projects, following directions, and evaluating are crucial skills in Introduction to Clothing and Textiles. Projects are evaluated on individual growth in sewing skills. Skills in art, communication, mathematics, science, and technology are reinforced. Note: Students must purchase their own supplies for projects. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Careers include: Fashion Designer, Visual Merchandiser, Textile Designer, Technical Designer, Brand or Product Manager, Patternmaker, Seamstress, Interior Designer, and Educator.

## **FASHION CONSTRUCTION (Course #H6212)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Introduction to Clothing and Textiles (formerly Clothing I)

Recommendation: "C" average in Introduction to Clothing and Textiles

Fashion Construction is a course designed for the student interested in a career in fashion and textile design, accessory design, costume design and more. This course emphasizes more advanced sewing skills, project planning, and expanding textile and fashion knowledge. Several garments and samples are to be constructed during the semester. Projects are evaluated on individual growth in sewing skills. Successful completion of this class provides students with an understanding of textile application and construction with an emphasis on quality. Note: Students must purchase their own supplies for sewing projects. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Careers include: Fashion Designer, Visual Merchandiser, Textile Designer, Technical Designer, Brand or Product Manager, Patternmaker, Seamstress, and Educator.

## **FASHION DESIGN AND MERCHANDISING (Course #H6213)**

GRADES 10, 11, 12

One semester - 1/2 credit

Prerequisite: Introduction to Clothing and Textiles

Recommendation: "C" average in Introduction to Clothing and Textiles

The Fashion Design and Merchandising course is designed to provide the student with knowledge of the various creative and business functions in the fashion industry. Students learn the dynamics of the fashion industry including a study of designers and historical clothing, fashion promotion, textiles, retail math, selling, visual merchandising, the design process, apparel production, merchandising trends, and career opportunities. Students develop an original fashion design project. This is not a clothing construction course. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Students will complete an end of course exam - Industry Recognized Certification (IRC) test - upon completion of this course, Introduction to Clothing and Textiles, and Fashion Construction (AAFCS) Careers include: Retail Promotions, Fashion Designer, Visual Merchandiser, Merchandise Manager, Buyer, Inventory Control, Textile Designer, Brand or Product Manager, Retail Manager, Marketing, Fashion Journalist, and Educator.

## **CULINARY ARTS I (Course #H6221)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

Culinary Arts I provides an opportunity for students with little or no prior food preparation experience, but with an interest in foods, to learn about culinary skills and careers in the hospitality and foodservice industry. This basic course introduces students to ProStart (a program created by the National Restaurant Association Educational Foundation) and the world of professional cooking. Topics of study include nutrition, meal planning, safety and sanitation, kitchen equipment and techniques, basic food preparation skills, potatoes, grains, breakfast foods, sandwiches and consumer skills. Science, math, technology, resource management and communication skills are reinforced in this course. Lab experiences are provided throughout the semester in order to reinforce these skills. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). This course is the first course of a three course sequence leading to a Technical Skills Assessment. Courses to follow are Culinary II and Culinary III. Careers include: Dietician, Hotel and Restaurant Manager, Food Photographer or Writer, Server, Culinologist, Food Stylist, Event Planner, Food Scientist, Pastry Chef, Food Scientist, and Educator.

## **CULINARY ARTS II (Course #H6222)**

GRADES 10, 11, 12

One Semester – ½ credit

Prerequisite: Culinary Arts I (formerly Introduction to Culinary Arts)

Recommendation: “C” average in Culinary Arts I

Culinary Arts II is a continuation of Culinary I providing the opportunity for the students to build upon skills in the hospitality and restaurant industry. This course prepares students to continue with the ProStart\* program. Culinary I information is reviewed and additional material is covered including customer service, management, equipment, stocks, soups and sauces, fruits and vegetables and more advanced food preparation skills are taught.. Lab experiences are provided throughout the semester in order to reinforce these skills. Science, math, technology, resource management and communication skills are reinforced in this course. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). This course is the second course of a three course sequence leading to a Technical Skills Assessment. Course to follow is Culinary III. Students will complete the end-of-course Industry Recognized Certification (IRC) test upon completion of this course. Careers include: Dietician, Hotel and Restaurant Manager, Food Photographer or Writer, Server, Culinologist, Food Stylist, Event Planner, Food Scientist, Pastry Chef, Food Scientist, and Educator. \*The ProStart Program is a School-to-Career program. It is a nationally recognized program designed by the Educational Foundation of the National Restaurant Association available to students.

## **CULINARY ARTS III (Course #H6223)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Culinary I & Culinary II

Recommendation- “C” average in Culinary I & Culinary II courses

\*This course may be available for college credit.

\*Weighted course

\*Nationally recognized ProStart certification is available for students upon completion of 400 hours of industry related experience and successfully passing the certification exam.

Culinary Arts III is the culminating course for the ProStart\* program. Culinary I and II information is reviewed and additional material is covered including the following: food service cost and purchasing, salads and garnishes, meat, poultry, and seafood, marketing, baking, sustainability and global cuisine. Lab experiences are provided throughout the semester in order to reinforce these skills. Science, math, technology, resource management and communication skills are reinforced in this course. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). This course is the third course of a three course sequence leading to a Technical Skills Assessment. Careers include: Dietician, Hotel and Restaurant Manager, Food Photographer or Writer, Server, Culinologist, Food Stylist, Event Planner, Food Scientist, Pastry Chef, Food Scientist, and Educator. \*The ProStart Program is a School-to-Career program. It is a nationally recognized program designed by the Educational Foundation of the National Restaurant Association available to students.

## **HOUSING AND INTERIOR DESIGN (Course #H6230)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Housing and Interior Design is a course that explores the psychological, social, cultural, and economic aspects of family and personal shelters. Projects may include the following topics: housing styles, design and architecture, floor plans, remodeling, and related career occupations. The ability to convert abstract design principles onto a variety of samples is required for mastery of class objectives including: following directions, self-motivation, and use of resources. Careers Include: Personal Property Appraiser, Painter, Building Manager, Architect, Urban and Regional Planner, Civil Engineer, Landscape Designer, Interior Designer, Home Builder, Carpenter, Real Estate Agent, City and County Planner, Computer Aided Design Technician, and Floor Covering Installer.

## **HUMAN RELATIONS (Course #H6240)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Human Relations is a course that is part of the Child Development Program of Study leading to a technical skills attainment. The course is designed to improve self-appreciation, personal development, communication, and coping skills to help better understand self and others. The focus centers on human interactions within the life cycle including dating, mate-selection, marriage, parenting and divorce. Other topics may include abuse, dying and death, communicable disease, mental health, human sexuality and lifestyles. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Careers include: Teacher, Pediatrician, Child care provider, Dietician, Social worker, Psychologists, and Nurse.

## **CAREER & FAMILY LEADERSHIP (Course #H6220)**

GRADES 9, 10, 11, 12

One Semester – 1/2 credit

The Career & Family Leadership course helps students explore their leadership skills and the importance of leadership as an integral part of all aspects of a person's life. Instruction emphasizes cooperative learning, interdisciplinary work, volunteerism and school-to-work transition. Students are expected to complete 20 hours of service and 2 hours of job shadowing. In this project based course, students address organization, personal interaction, leadership, communication, conflict and stress management skills to guide behavior in the family, workplace, and community. Students apply problem-solving and leadership skills as they progress through the course. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS). Students are expected to complete a FCCLA STAR event project and extensive career related research project. Careers include: Organizational Leader, Corporate Trainer, Job Recruiter, Human Resources, Counselor, Grant Writer, Labor Consultant, Motivational Speaker, Personnel Manager, and Administrator.

## **FACS INTERNSHIP (Course #H6250)**

GRADE 12

Two semesters - 1 credit

Prerequisite: previous 1/2 credit of any FACS course APPLICATION AND TEACHER APPROVAL ARE REQUIRED FOR ADMITTANCE INTO THIS COURSE.

The FACS Internship course offers a hands-on learning opportunity in a FACS related industry including food industry, child care, retail, and health services. The student will secure their own work experience the summer prior to the start of the school year. The student will communicate with the instructor to get approval for the work experience. Students must provide their own transportation for the internship. The student, instructor and Work-Site Supervisor meet to identify learning goals (outcomes) and objectives (activities) designed to provide a thorough understanding of the profession. Students are introduced to Family Career and Community Leaders of America (FCCLA) which is the co-curricular career and technical student organization (CTSO) associated with Family & Consumer Sciences (FACS).

## **SENIOR FACS (Course #H6224)**

GRADE 12

One Semester - 1/2 credit

Regardless of the path you choose after high school, the “real world” is not far away. If you haven’t already begun preparations for the next step in life, now is the time. This course is designed to acquaint students with wise decision making, goal setting, and management skills. Students apply practical reasoning in the preparation of a personal plan for living independently. Course topics include, but are not limited to the following: post-secondary education, career investigation, employability skills, personal finance, housing, nutrition, food preparation and clothing care. You will use the information presented in the semester to prepare you for what lies ahead. Careers include: Personal Finance, Insurance, Food Service/Hospitality, Retail Sales, Property Management, Counselor, Finance Administrator, Personnel Management, and Education.



# ***Industrial Technology***

Industrial Technology provides opportunities for all students to develop an understanding of the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology. It is designed to assist students in making intelligent career choices and preparing for enrollment in advanced or highly skilled vocational-technical educational programs.

## **INDUSTRIAL WOODS TECHNOLOGY I (Course #H6320)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Project fees will be assessed

This is an introductory course in woodworking. Students enhance their understanding of lifelong skills needed for a career in woodworking and/or carpentry. Students are instructed in the areas of woodworking components, layout and project planning, and project completion. A major emphasis is placed on shop safety, proper tool usage, and wood processes. Students demonstrate problem solving, collaboration, and accountability while creating quality, teacher approved woodworking projects through the design process.

## **INDUSTRIAL WOODS TECHNOLOGY II (Course #H6322)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Recommendation: Industrial Woods Technology I with Instructor Recommendation

Project fees will be assessed

This course is an intermediate application of the skills mastered in Industrial Woods Technology I. Students independently demonstrate the advanced applications of joinery techniques, project layout and design, and project construction. Skills in problem solving, collaboration, accountability and safety are reinforced.

## **INDUSTRIAL METALS TECHNOLOGY (Course #H6330)**

GRADES 10, 11, 12 (Holt Only)

Two Semesters - 1 credit

Project fees will be assessed

This course is an introductory course in metalworking. Students enhance their understanding of lifelong skills needed for a career in welding and/or machine operation. Students are instructed in the areas of metalworking components, layout and project planning and project completion. A major emphasis is placed on shop safety, proper tool usage and metal processes. Students demonstrate problem solving, collaboration, and accountability while creating quality, teacher approved metalworking projects through the design process.

## **DRAFTING AND DESIGN TECHNOLOGY (Course #H6340)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

This course is an introductory level course in architecture and engineering. Topics will include equipment, geometric construction, orthographic projection, dimensioning, pictorial views, and construction of working drawings. Students will be given experiences in hand drawing and on the computer using AutoCAD.

## **HOME MAINTENANCE AND REPAIR (Course #H6335)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

A \$30 course fee will be assessed

This course gives students a basic understanding of common tools and repair techniques necessary to maintain a home. The students learn by making repairs on actual structural components of the home using appropriate tools, materials and processes. The course offers practical advice about when to seek professional help. Course units include 1) Safety and Basic Tools, 2) Framing, 3) Electrical Maintenance and Repair, 4) Plumbing and 5) Dry walling, Taping and Painting.

## **INDEPENDENT PROJECTS IN INDUSTRIAL TECHNOLOGY (Course #H6370)**

GRADE 11, 12

One Semester - 1/2 credit

Prerequisite: 2 Industrial Technology credits with instructor approval (e.g. Industrial Woods Technology)

This class is for students who have mastered basic competencies of Industrial Technology and who want to pursue an area or areas to a greater depth. This course allows students to choose independent projects in the various fields of Industrial Technology in order to further advance their knowledge and skills in chosen areas. Students research a new skill and incorporate that skill into an advance project. This enhanced research and skill improvement will be contracted between the teacher and the student.

# ***Link Crew***

## **LINK CREW LEADERSHIP (Course #H1010)**

GRADES 11, 12

Two Semesters – 1 credit

Perquisite: Acceptance into Link Crew Program (application and interview required)

Link Crew focuses on leadership development for juniors and seniors who have been accepted into the Link Crew program. The class will continue the leadership training started during the summer in preparation for freshmen orientation, and prepare Link Leaders to make a positive and lasting impact on the incoming freshmen class. The grade for link crew will be derived from committee work, in class performance events, and implementation of freshmen support programs.

# *Marketing Education*

The Marketing Education Program is designed to prepare high school juniors and seniors for careers in marketing, merchandising, and management. The program consists of three elements: classroom instruction, on-the-job training, and participation in the vocational youth organization, DECA (an organization for marketing students). The classroom instruction emphasizes basic and social skills necessary in dealing with customers and co-workers, as well as skills in marketing, sales promotion, selling, mathematics, and merchandising. Participation in the marketing internship (on-the-job training) is optional for juniors and seniors. This training gives the student the opportunity to use the marketing skills they have developed in the classroom and to determine if they are suited for a career in marketing, as well as to give the experience for future promotions and further education in marketing. Students are encouraged to join DECA in order to participate in the student-organized projects, meetings, and competitive events, which allow them to have interaction with business people and students from other schools.

**MARKETING ARTICULATION AGREEMENT WITH ST. CHARLES COMMUNITY COLLEGE** Through an agreement with St. Charles Community College it is possible to receive college credit through courses offered in the WSD Marketing Department. For more specific information, please refer to College Articulation Agreement in this guide or contact an instructor in the Marketing Department.

## **High School**

Entrepreneurship (1 sem) + Management (1 sem)	=	<b>SCC Matching Allowance</b> BUS 101 Intro to Business 3cr
Intro. To Marketing (2 sem) + Advanced Marketing (2 sem)	=	BUS 230 Prin. of Marketing 3cr

## **L.E.A.D (LEADING EFFECTIVELY THROUGH ACADEMIC DEVELOPMENT) (Course #H6407)**

GRADES 9, 10

One Semester – ½ credit

Leadership is the awareness and betterment of self and others while proactively meeting challenges and affecting positive change. The purpose of this course is to enable students to acquire and apply leadership processes, strategies, and tactics. Students will generate project ideas, demonstrate emotional intelligence, examine personal characteristics associated with leaders, utilize teamwork skills, apply project management skills and integrate public relations skills.

## **MARKETING PRINCIPLES (Course #H6400)**

GRADES 10, 11, 12

Two Semesters - 1 credit

A course with the emphasis on marketing principles and the introduction to marketing careers. Topics covered include marketing, economics, careers, communications, selling, promotion, market planning, pricing, and marketing operations.

## **ADVANCED MARKETING (Course #H6405)**

GRADE 11, 12

Two Semesters - 1 credit

Prerequisite: Marketing Principles Recommendation: "C" average in Marketing Principles

\*Weighted Course

This course emphasizes marketing practices and principles. Course work covered includes advanced study in consumer marketing, the global market, market research, sports and entertainment marketing, public relations, new product development and marketing careers. The primary objective of this course is to provide the students with the opportunity to utilize technology and explore the avenues of marketing. Leadership skills will be developed through participation in leadership committees; therefore, membership in DECA (an Association of Marketing Students) is a requirement of this course. Projects may require additional time outside of class.

## **ADVANCED MARKETING II (Course #H6406)**

GRADE 12

Two Semesters - 1 Credit

Prerequisite: Advanced Marketing I and application.

\*Weighted Course

Advanced study in Marketing is designed to enhance the leadership, managerial and organizational abilities of the students enrolled in the course. Students in Advanced Marketing II will plan, organize, and implement school and community projects and/or events to better prepare them in managerial roles as citizens. Additionally, students further develop their leadership skills by taking on increased responsibilities and executive leadership roles as DECA members.

## **MANAGEMENT (Course #H6410)**

GRADES 11, 12

One Semester – ½ credit

Today's students are actively involved with business organizations at all levels. Whether they are employees, managers, entrepreneurs, concerned citizens, consumers, or social group members, students' involvement with business organizations are numerous and varied. These personal experiences provide a foundation for a meaningful and systematic study of business, organizations, and management. This course provides a critical understanding of how business organizations work and are managed, their goals, strategies, structures, technologies, environments, and the motivations and interests of the people involved. Activities and assessments promote critical thinking and decision making while addressing the importance of technology and the global nature of business. Projects may require additional time outside of class.

## **ENTREPRENEURSHIP (Course #H6420)**

GRADES 11, 12

One Semester - 1/2 credit

Prerequisite: Marketing Principles or Instructor Approval

Entrepreneurship promotes understanding and skills of various marketing functions by coordinating channel management with other marketing activities, creating a marketing plan, generating product ideas, coordinating activities in the promotional mix, and demonstrating specialized sales processes and techniques. Students apply critical thinking skills by developing the various facets of a business plan and ultimately presenting that plan to potential investor (through role-play at DECA competition).

## **MARKETING INTERNSHIP (Course #H6440)**

GRADES 11, 12

Two Semesters - 1 credit (Option: 2 credits with Parent, Counselor and Instructor consent see below.)

Prerequisite: Must be enrolled in other Marketing courses and application approved.

\*Students may not pre-enroll in this course; they must complete an application and wait for approval.

This is a two-semester paid internship in a marketing or management position for a business under the supervision of the Marketing Education coordinator and the employer. Student will relate classroom training with on the job experiences. Three levels of internship will be offered through the marketing education coursework: introduction to employment, advanced employment skills, and management training skills. Students must submit an application to the marketing education department and be selected prior to enrollment in the course. Credit is awarded to students who work a minimum of 10 hours per week and complete work related assignments. As an option, students may have the opportunity to participate in the 2 credit program that requires working a minimum (not average) of 20 hours per week instead of 10 hours per week. It also requires additional permission based on whether the student's grades are strong enough to work this many hours. Student's progress is determined by means of training plans developed in cooperation with the employer. Regular visits are made to the training station to observe the student and discuss his/her progress with the employer. Student is graded by a combined teacher-employer evaluation.

## **DECA MANAGEMENT (Course #H6430)**

GRADE 12

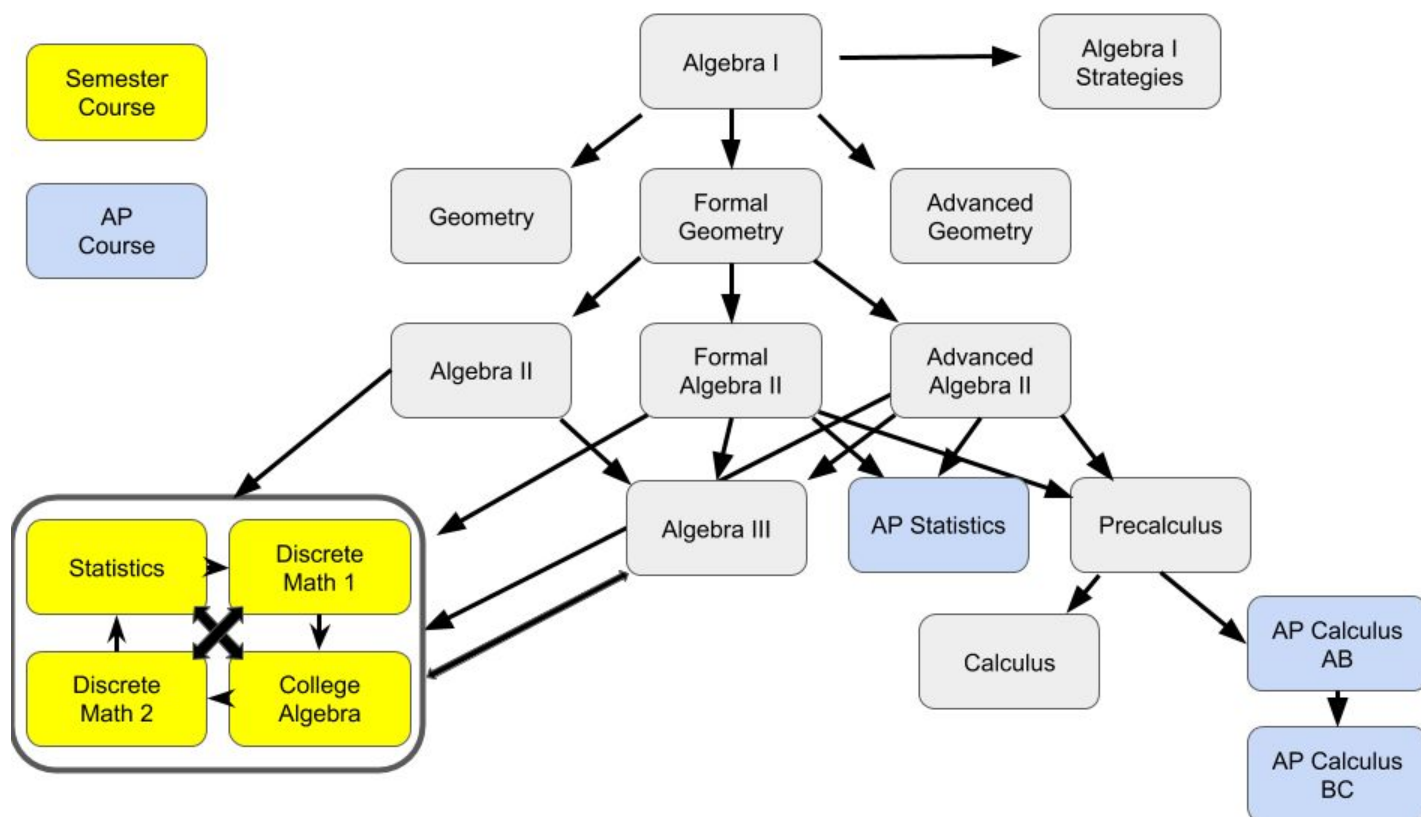
Two Semesters - 1 credit

Prerequisite: Must have completed Marketing Principles and be enrolled in Advanced Marketing, Advanced Marketing II, Entrepreneurship, or Management.)

\*This course requires an application, recommendations, and an interview.

This course is designed for students to take the skills learned in the Introduction to Marketing course and apply them in a real work experience by operating the DECA School Store. Student selection will be based on an application and interview process, teacher recommendation, and successful completion of the Introduction to Marketing course. Students will develop and enhance their personal skills necessary for success on the job. This personal experience will provide an understanding of how businesses operate on a day-to-day basis. Student activities will promote problem solving and decision making in the areas of cash handling, record keeping, promotion, marketing concept, inventory control, and customer relations. Student evaluation will be determined by on the job responsibilities and participation.

# Math Education



District Math requirements - Six semesters of Math courses. Students taking the Algebra I EOC in middle school must take Algebra II.

\* It is recommended to take a Math course all 4 years in high school if you are planning to pursue postsecondary education.

## ESSENTIALS OF MATHEMATICS (Course #H4032)

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Mathematics teacher recommendation

Essentials of Mathematics is a mathematics course designed for students that need mastery of basic mathematical skill sets to be successful in a high school Algebra I course. The course will identify gaps in individual student's skills, then work to develop conceptual understandings for those skills, as well as create understandings of basic Algebra I concepts. Course topics may include developing fluency in computational arithmetic, operations with real numbers, ratios, proportions, percentages and basic algebraic skills. Essentials of Mathematics is not considered a high school level mathematics course.

### **ALGEBRA I STRATEGIES (Course #H4037)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Teacher Placement

Note: This course is an elective and will not count towards fulfillment of the Mathematics requirement for graduation.

Algebra I Strategies is an elective course for identified students, which is designed to enhance and reinforce the skills and conceptual understandings being developed in Algebra I. Students will be engaged in learning activities that will supplement, apply, and integrate algebraic concepts. The focus of the course will be to augment skills needed to be successful in Algebra I. Students enrolled in this course must be simultaneously enrolled in Algebra I.

### **ALGEBRA I (Course #H4041)**

GRADES 9, 10, 11, 12

Two Semesters - 1 Credit

Algebra I places a strong emphasis on linear, quadratic and exponential functions and data analysis. This foundational course is designed to prepare students to be college and career ready as well as to be successful in more advanced classes in high school. Homework should be expected regularly and a variety of other resources may be utilized. Students will be required to take the Missouri End-Of-Course Exam upon completion of this course. Students must score Proficient or Advanced on the Algebra 1 EOC to maintain eligibility for the A+ program.

### **GEOMETRY (Course #H4052)**

GRADES 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Algebra I

Geometry covers the foundational concepts of a Formal Geometry course. This course covers geometric terminology, reasoning, lines, triangles, similarity, quadrilaterals, transformations, circles, area, perimeter, surface area and volume. Emphasis will be placed on applying these concepts to problem solving situations.. A variety of resources may be utilized.

### **FORMAL GEOMETRY (Course #H4054)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Algebra I

Recommended: Minimum of “C” average in Algebra I

Formal Geometry covers the concepts taught in a traditional Geometry course. Geometry builds reasoning skills through inductive and deductive thinking with problem solving. Algebraic skills and concepts are applied to enhance geometric understanding. Geometry uses both coordinate and non-coordinate systems with transformation, similarity and congruence properties to explore triangles, polygons, circles and polyhedrons. Emphasis is on the development of logic, formal proofs, and algebraic applications to geometry. Some activities will require additional time outside of class. A variety of resources may be utilized.

### **ADVANCED GEOMETRY (Course #H4057)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Algebra I

Recommended: Minimum "B" average in Algebra I

Advanced Geometry is an in-depth study of Euclidean Geometry. Topics covered include those that are taught in Formal Geometry (non-coordinate systems with transformation, similarity and congruence properties to explore triangles, polygons, circles and polyhedrons), as well as a variety of additional advanced topics. A greater emphasis will be placed on inductive and deductive reasoning skills, formal proofs, and algebraic applications to geometry. Students will be expected to incorporate prior knowledge to solve higher-order thinking problems. Students can expect to spend additional time outside of class completing assignments and activities.

### **ALGEBRA II (Course #H4043)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Formal Geometry or Geometry

Algebra II is designed to build upon mathematical concepts and relationships studied in Algebra and Geometry. Students will explore mathematical relationships, generate and interpret graphs, use mathematical techniques in problem solving situations, and employ the appropriate techniques and strategies (from the study of algebraic and geometric properties) to solve equations and convert expressions to equivalent forms. A variety of resources may be utilized.

### **FORMAL ALGEBRA II (Course #H4044)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Advanced Geometry or Formal Geometry

Recommended: Minimum "C" average in Formal Geometry

Formal Algebra II is designed to further develop the mathematical concepts and relationships studied in Algebra I and Geometry. It will enhance the student's ability to solve algebraic equations and inequalities; explore graphing of equations and inequalities in two variables; expand upon prior knowledge of functions, including domains, and in-depth study of polynomial equations. In addition, students will gain knowledge of complex numbers, quadratic equations, sequences and series, statistics, logarithms, and logarithmic equations, as well as an introduction to trigonometric concepts. A variety of resources may be utilized.



## **ADVANCED ALGEBRA II (Course #H4047)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Advanced Geometry

Recommended: Minimum “B” average in Advanced Geometry

Advanced Algebra II is a fast paced course designed to further develop the mathematical concepts and relationships studied in Algebra I and Geometry. It will enhance the student’s ability to solve algebraic equations and inequalities; explore graphing of equations and inequalities in two variables; expand upon prior knowledge of functions, including domains, and polynomial equations. In addition, students will gain knowledge of complex numbers, quadratic equations, sequences and series, statistics, and a more in-depth study of logarithms, logarithmic equations, and trigonometric concepts. Regular assignments should be expected. A variety of resources may be utilized.

## **ALGEBRA III (Course #H4049)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Successful completion of Algebra II, Formal Algebra II or Advanced Algebra II

Algebra III is a full-year course designed to enable students not yet ready for college level coursework to experience mathematics at an advanced level. This course is intended for college-bound students who are not necessarily planning to pursue a career in a mathematical, scientific, or technical field. Concepts studied include extensions of topics from Algebra II: linear, quadratic, polynomial, rational, radical, exponential, logarithmic functions and their graphs; as well as conic sections.

## **PRECALCULUS (Course #H4082)**

Grades: 11, 12

Two Semesters - 1 credit

Prerequisite: Formal Algebra II or Advanced Algebra II

Recommended: B average in Formal Algebra II or Advanced Algebra II

\* Weighted Course

Precalculus is a rigorous course designed to prepare students for the advanced mathematics they will encounter in pursuing a career in a technical field and/or further study of mathematics through calculus. The content consists of topics covered in precalculus and advanced trigonometry. It will expand the ideas of algebraic functions covered in Formal Algebra II or Honors Algebra II and will extend those concepts to transcendental functions and their inverses. A strong emphasis will be placed on the behavior of functions in both an algebraic and geometric setting. A minimum of one hour additional time outside of class for each hour of class time is normal at this level. A variety of resources may be utilized.

### **CALCULUS (Course #H4083)**

Grades: 11, 12

Two Semesters – 1 credit

Prerequisites: Students must have completed Pre-Calculus with a C or better or have teacher recommendation.

\*Weighted Course

Calculus will address limits, derivatives, and integrals of polynomial, exponential, logarithmic and trigonometric functions, and applications of differentiation and integration. This course prepares the student to take Calculus I at the college level. Graphing calculators will be integrated throughout this course.

### **AP CALCULUS AB (Course #H4085)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Precalculus

Recommendation: “B” average in Precalculus

\*Weighted Course

AP Calculus AB is a rigorous course designed to prepare students for the advanced mathematics they will encounter in pursuing a technical field. It will expand the ideas covered in previous courses, proving the theory and derivation of many previously learned formulas and concepts. In addition students will learn new techniques of determining function behavior. This course focuses on the operations and applications of limits, differentiation and integration. AP Calculus AB is the equivalent of Calculus I at the college level. Projects may require additional time outside of class. A variety of resources may be utilized. Upon completion of the course, students may elect to take the AP Calculus AB exam. Graphing calculators will be integrated throughout this course.

### **AP CALCULUS BC (Course #H4086)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: AP Calculus AB

\*Weighted Course

AP Calculus BC is a highly rigorous and college-paced course designed to prepare students for the advanced mathematics they will encounter in pursuing a technical field. AP Calculus BC will cover all of the topics in AP Calculus AB, but will include additional units of study and extensions to many of the topics found in AP Calculus AB. The course focuses on: functions, graphs and limits extending to parametric, polar and vector functions; differentiation and integration and their applications; and polynomial approximations and series. AP Calculus BC is equivalent to Calculus I and Calculus II at the college level. Projects may require additional time outside of class. A variety of resources may be utilized. Upon completion of the course, students may elect to take the AP Calculus BC exam. Graphing calculators will be integrated throughout this course.

### **STATISTICS (Course #H4080)**

GRADES 11, 12

One Semester - 1/2 credit

Prerequisite: Algebra II or higher

Statistics is a course designed to prepare students for the statistics they will encounter in a variety of college courses. It will expand upon the ideas covered in previous mathematics courses, extending their application to inferential statistics. Topics will include the collection, synthesis, and analysis of various types of data, emphasizing applications of the normal distribution. Projects may require additional time outside of class. A variety of resources will be utilized, including (but not limited to) graphing calculators and spreadsheets.

### **AP STATISTICS (Course #H4081)**

Grades 11, 12

Two Semesters – 1 credit

Prerequisite: Successful completion of Formal Algebra II or Advanced Algebra II

\*Weighted Course

AP Statistics is a rigorous course that is designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: 1) Exploring Data: Describing patterns and departures from patterns, 2) Sampling and Experimentation: Planning and conducting a study, 3) Anticipating Patterns: Exploring random phenomena using probability and simulation, and 4) Statistical Inference: Estimating population parameters and testing hypotheses. Students who successfully complete the course and AP examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. Projects may require additional time outside of class. A variety of resources may be utilized. Upon completion of the course, students may elect to take the AP exam in Statistics.

### **COLLEGE ALGEBRA (Course #H4048)**

GRADES 10, 11, 12

One Semester – 1/2 credit

Prerequisite: Successful completion of Formal Algebra II or Advanced Algebra II with a C or higher recommended.

Note: This is NOT an alternative to Formal Algebra II; may be taken concurrently with any math course above Formal Algebra II.

\*This course may be available for college credit through Missouri Baptist University. College credit is only available to students with a 3.0 cumulative GPA (per MOBap). Please see your counselor or instructor for details.

\*Weighted Course

College Algebra is intended to ease the transition for the study and pace of college mathematics. The course will be an in depth study of families of algebraic functions and relations, including polynomial, exponential, and logarithmic functions as well as conic sections and matrices. Emphasis will be placed on the algebraic manipulation and problem solving found in the study of these algebraic functions and relations.

### **DISCRETE MATH 1 (Course #H4087)**

GRADES 11, 12

One Semester – ½ credit

Prerequisite: Algebra II or higher

\*Discrete Math 1 can be taken concurrently, before, or after Discrete Math 2.

Discrete Math 1 broadens mathematical concepts and ideas. The class explores mathematics not traditionally found in the high school math curriculum. This class provides an insight into what mathematics has to offer beyond algebra and geometry. Topics of study include number theory, numeration systems, math history, logic, graph theory and programming.

### **DISCRETE MATH 2 (Course #H4088)**

GRADES 11, 12

One Semester – ½ credit

Prerequisite: Algebra II or higher \*Discrete Math 2 can be taken concurrently, before, or after Discrete Math 1.

Discrete Math 2 is a course that will broaden mathematical concepts and ideas. The class explores mathematics not traditionally found in the high school math curriculum. This class provides an insight into what mathematics has to offer beyond algebra and geometry. Topics of study include the mathematics of finance, set theory, counting techniques, cryptography, election theory, and geometry.

### **CONSUMER MATHEMATICS (Course #H4050)**

GRADES 11, 12

One Semester – ½ credit or 2 semesters – 1 credit

\*Students may enter Consumer Mathematics at the beginning of either semester.

Consumer Mathematics is designed to prepare students for real-life situations encountered as a consumer and a citizen. Emphasis will be focused on working with percentages, finances, housing, shopping, travel, and income taxes. Some activities may require additional time outside of class. A variety of resources may be utilized. Consumer Mathematics is not considered a college preparatory course.

## ***Music Education***

### **GUITAR I (Replaces General Music) (Course #H6536)**

Grades 9, 10, 11, 12

One Semester - ½ Credit

Guitar I is a semester long course in basic music fundamentals which will be taught using the guitar. This course is not designed for students with guitar experience. Acoustic guitars will be provided during the class instruction. The fundamentals of acoustic guitar playing will be taught, including the tuning, playing technique, basic music notation, and sight reading. The student will learn to play melody lines as well as basic chords in several keys. Opportunities will be given to play both alone and in small ensembles.

**GUITAR II (Replaces General Music)(Course #H6537)**

Grades 9, 10, 11, 12

One Semester - 1/2 Credit

Prerequisite: Guitar I or Teacher Recommendation

Guitar II is a continuation of the skills learned in Class Guitar 1. Students will continue to develop music reading skills, right and left hand techniques, and ensemble performances.

**PIANO I (Replaces General Music) (Course #H6540)**

Grades 9, 10, 11, 12

One Semester - 1/2 Credit

Piano 1 is a semester long course in basic music fundamentals which will be taught using the keyboard. This course is not designed for students with piano experience. Electric keyboards will be provided during the class instruction. The fundamentals of keyboard playing will be taught, including playing technique, basic music notation, and sight reading. The student will learn to play melody lines as well as basic chords in several keys. Opportunities will be given to play both alone and in small ensembles.

**PIANO II (Replaces General Music) (Course #H6541)**

Grades 9, 10, 11, 12

One Semester - 1/2 Credit

Prerequisite: Piano I or Teacher Recommendation

Piano 2 is a continuation of the skills learned in Class Piano 1. Students will continue to develop music reading skills, right and left hand techniques, and solo/ensemble performances.

**BAND (Course #H6550)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Audition

This is a course with emphasis on the performance of marching and concert band music. Extra rehearsals for marching and concert preparation are required. \*\*\*Students may opt to take the 4th year of Band for weighted credit. See instructor for more information.

**BARITONE CHORUS (Course #H6510)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Audition

The Baritone Chorus is a course in which students will study and perform all styles of music. Students and parents should be aware of required attendance at all rehearsals and performances scheduled outside the class period. This is considered a course for beginning and advanced singers.

**TREBLE CHORUS (Course #H6520)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Audition

The Treble Chorus is a course in which students will study and perform all styles of music. Students and parents should be aware of the required attendance at all rehearsals and performances outside the class period. No previous choral experience is required for this choir.

**SELECT TREBLE CHOIR (Course #H6521)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Audition

The Select Treble Choir is an intermediate level course in which students will study and perform all styles of music. Students and parents should be aware of the required attendance at all rehearsals and performances outside the class period. Previous musical training is encouraged but not mandatory for this choir.

**CONCERT CHOIR (Course #H6530)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Audition

The Concert Choir is a select group chosen by individual audition. Significant choral music of every period in music history is sung. Emphasis is placed on rehearsal skills, singing skills and individual musicianship. This choir is the top choral performing group. An extensive performance schedule and an annual tour are expected. \*\*\*Students may opt to take the senior year of Concert Choir for weighted credit. See instructor for more information.

**CHAMBER CHOIR (Course #H6525)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Audition and previous and/or concurrent participation in previous high school ensembles.

Chamber Choir is a small, conducted ensemble designed to provide experienced and advanced singers with the opportunity to prepare and perform choral music from all representative styles, from the Renaissance period through Contemporary Vocal Jazz. Fundamentals of theory and vocal technique will also be emphasized. Members of the choir will be encouraged to expand their performance opportunities by participating in local, district and state activities that include solo and small ensemble singing.

## **AP MUSIC THEORY (Course #H6545)**

GRADES 11, 12

Two semesters – 1 credit

Prerequisite: Consent of instructor

\*Weighted Course

The ultimate goal the AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. In this course students will develop aural skills, sight-singing skills, written skills, compositional skills, analytical skills. The development of these skills occurs through listening, performance, written, creative, and analytical exercises. Upon completion of this course, students may elect to take the AP Music Theory exam.

# ***Physical, Driver, and Health Education***

The Physical Education courses offered at high schools in the Wentzville School District are designed to promote lifelong health and fitness. All courses can be taken for credit more than once (with the exception of Physical Education, Health, Outdoor Pursuits 1, Outdoor Pursuits 2 and Driver Education.) Students may take multiple Physical Education courses during the same semester.

## **PHYSICAL EDUCATION (Boys PE Course #H6600; Girls PE Course #H6602)**

GRADE 9

One Semester – 1/2 Credit

\*Required for Graduation

This is a course designed to enhance the physical, mental, and social growth of the student through team and individual sports having lifetime value. Physical fitness is emphasized through daily exercises and running or aerobic activities, as well as through written material, activities and tests. Activities may include but are not limited to the following: fitness, football, basketball, volleyball, softball, weight training, tennis, track, and soccer.

## **HEALTH (Course #H6610)**

GRADE 9

One Semester - 1/2 credit

\*Required for graduation

Health is a one-semester comprehensive course for all students. The course provides information for improving personal, school, and community health. Students will learn how to utilize decision-making skills and goal-setting skills to enhance their personal health. Students will also learn to advocate for personal, family, and community health, as well as how to follow health-enhancing behaviors and reduce health risks. Students will learn how to analyze the influences of family, peers, media, culture, and technology on health behaviors and they will gain an understanding of concepts related to health promotion and disease prevention.

### **FITNESS WALKING (Course #H6631)**

GRADES 9, 10, 11, 12

One semester – ½ credit

Prerequisite: Physical Education

This co-educational course is designed to address walking as a cardiovascular activity. Fitness walking is moving fast enough to raise your heart rate into its training zone. Students acquire the knowledge, skills, and attitude necessary for physical fitness through participation in a carefully monitored walking program. The class includes learning activities covering the five health related components of fitness: cardiovascular endurance, muscular endurance, muscular strength, flexibility, and body composition). Weather permitting, students use outdoor fitness walking courses.

### **LIFETIME SPORTS (Course #H6642)**

GRADES 9, 10, 11, 12

One semester – ½ credit

Prerequisite: Physical Education

This co-educational course is designed to further enhance physical, mental and social growth of the student through sports having lifetime value. In this class, students also participate in daily fitness activities. Physical fitness is emphasized through various activities including, but not limited to: tennis, frisbee, badminton, washers, pickleball, wiffle ball, softball, and volleyball.

### **PERSONAL FITNESS (Course #H6643)**

GRADES 9, 10, 11, 12

One semester – ½ credit

Prerequisite: Physical Education

This co-educational course is designed to tone and tighten the body. Students burn fat and improve fitness levels in a noncompetitive environment while participating in a variety of fitness activities. Students develop and participate in a fitness program designed to reach their individual fitness goals. Students also participate in roundtable discussions about nutrition and living a healthy lifestyle. Examples of fitness activities are, but not limited to: dance, step-aerobics, hip-hop aerobics, kickboxing, yoga, Pilates, walking programs, biking and circuit training.

### **OUTDOOR PURSUITS I (Course #H6615)**

GRADES 9, 10, 11, 12

One semester – ½ credit

\*This course is an elective and will not count towards fulfillment of the Physical Education requirement for graduation.

This co-educational course emphasizes the rules and regulations that govern conservation in Missouri. Topics discussed include, but are not limited to: basic fishing methods and techniques, basic survival skills, basic hunting techniques, basic archery and competition shooting, and orienteering. Students will earn their hunter safety education certification and will complete the boater's education course.



## **OUTDOOR PURSUITS II (Course #H6616)**

GRADES 9, 10, 11, 12

One semester – 1/2 credit

Prerequisite: Physical Education, teacher recommendation, and a grade of C or better in Outdoor Pursuits I

\*This course is an elective and will not count towards fulfillment of the Physical Education requirement for graduation.

This co-educational course will re-emphasize the rules and regulations that govern conservation in Missouri. Units that will be discussed include but are not limited to: advanced fishing techniques and methods, fly fishing, advanced survival skills, trapping and fur-bearing, cooking and cleaning of wild game, hiking/camping, outdoor adventures, geocaching, 3D archery, and air rifles.

## **SPEED AND AGILITY (Course #H6635)**

GRADES 9, 10, 11, 12

One semester - 1/2 credit

Prerequisite: Physical Education

This co-educational course is designed to improve the skill related components of fitness; speed, agility, coordination, balance, power, and reaction time. This is accomplished through various activities including but not limited to the following: plyometric workouts, cone drills, dot drills, agility ladders, and sprint work. Weather permitting, students use outdoor facilities.

## **TEAM SPORTS (Course #H6630)**

GRADES 9, 10, 11, 12

One semester – 1/2 credit

Prerequisite: Physical Education

This co-educational course is designed to teach students how to use different gameplay tactics and strategies within a team setting. In this class, students also participate in daily fitness activities. The students engage in various team sports including but not limited to: basketball, football, soccer, softball, and volleyball.

## **WEIGHT TRAINING (Boy's Course #H6611/Girl's Course #H6612)**

GRADES 9, 10, 11, 12

One semester – 1/2 credit

Prerequisite: Physical Education

This course is designed to provide an opportunity for development of muscular strength and endurance. Free weights, exercise machines and conditioning exercises are incorporated to improve many of the elements of fitness. Proper technique, safety precautions, and proper applications of multiple exercises are emphasized. Students learn anatomical positions and muscle structure, as well as muscle groups.

## DRIVER EDUCATION (Course # H6620)

GRADE 9, 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Students must be at least 15 years old by September 30 (if enrolled in first semester) or by March 1 (if enrolled in second semester) . \*This course is an elective and will not count towards fulfillment of the Physical Education requirement for graduation.

Driver Education is a course stressing the skill and responsibility required for the safe operation of motor vehicles. Major topics are: laws and regulations, basic driving tasks, environmental conditions that affect driving, alcohol and drugs, traffic interactions, and consumer issues. Note: The course offers a behind-the-wheel driving experience for those that wish to participate. The Wentzville School District has set a fee of \$225 (amount subject to change prior to start of the school year) for those who wish to take this part of the course. The after school driving lessons are not a part of the class grade and are optional.

# Project Lead the Way

Project Lead The Way (PLTW) is the nation's leading provider of science, technology, engineering, and math (STEM) programs. Through world-class curricula, high-quality teacher professional development, and outstanding partnerships, PLTW is helping students develop the skills needed to succeed in the global economy. The Wentzville School District offers all 3 program sequences that are available from PLTW: Engineering, Biomedical Science and Computer Science. For more information about Project Lead the Way (PLTW) and the program sequences, please visit the website: [www.pltw.org](http://www.pltw.org)

PLTW Program	1 <sup>st</sup> course	2 <sup>nd</sup> course	3 <sup>rd</sup> course(s)	4 <sup>th</sup> course
<a href="#">Engineering</a> – practical arts credit	Introduction to Engineering Design (IED)	Principles of Engineering (POE)	<ul style="list-style-type: none"><li>· Aerospace Engineering (AE)</li><li>· Civil Engineering and Architecture (CEA)</li><li>· Computer Science Principles</li><li>· Digital Electronics (DE)</li></ul>	<ul style="list-style-type: none"><li>· Capstone Course – Engineering Design and Development (EDD)</li><li>· <i>any of the 3<sup>rd</sup> courses</i></li></ul>
<a href="#">Biomedical Science</a> – science credit	Principles of Biomedical Science (PBS)	Human Body Systems (HBS)	Medical Interventions (MI)	Capstone Course – Biomedical Innovation (BI)
<a href="#">Computer Science</a> practical arts credit	Computer Science Principles <i>* prepares students for AP Computer Science Principles exam</i>	See AP Computer Science A ( <i>not part of the PLTW sequence</i> )		

## ***PLTW Engineering (Practical Arts Credits)***

### **INTRODUCTION TO ENGINEERING DESIGN (IED) (Course #H1029)**

GRADES 9, 10, 11, 12

Two semesters-1 credit

Recommendation: Grade of B or higher in Algebra 1, completion or concurrent enrollment in Geometry, proficient use of Microsoft Office products such as PowerPoint and Word, and strong reading and comprehension skills.

\*Weighted Course

Introduction to Engineering Design™ (IED) is the first PLTW - Engineering course and is appropriate for high school students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills, creative abilities, and understanding of the design process. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education. The course assumes no previous knowledge, but students should be concurrently enrolled in Geometry and an upper level science. Students use a state of the art 3D solid modeling design software package to help them design solutions to solve proposed problems which will increase in difficulty throughout the course. Students also learn how to document their work and communicate their solutions to their peers and members of the professional community. Introduction to Engineering Design is a foundational course in the Project Lead the Way high school pre-engineering program.

### **PRINCIPLES OF ENGINEERING (Course #H1035)**

GRADES 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Introduction to Engineering Design Recommended: “B” average in Geometry, Formal Geometry or Advanced Geometry

\*Weighted Course

Principles of Engineering is the second PLTW - Engineering course and uses project-based, hands-on experiences to teach students the key elements and skills of engineering and technology-based careers. Concepts in this course include communication and documentation, design process, engineering systems, statics and strength of materials, materials and material testing in engineering, engineering for reliability, and kinematics. This course explores technology systems, manufacturing processes, and addresses the social and political consequences of technological change. The application of physics, trigonometry, and applied sciences are integrated in the course to solve engineering problems. Autodesk Inventor software is utilized to assist in completion of projects.

## **DIGITAL ELECTRONICS (Course #H1036)**

GRADES 10, 11, 12

Two semesters- 1 credit

Prerequisite: Introduction to Engineering Design (IED)

Recommendation: Completion of Principles of Engineering and a “B” average in Geometry, Formal Geometry or Advanced Geometry

\*Weighted Course

Digital Electronics™(DE) is a high school level course that is appropriate for college bound students interested in electrical engineering, electronics or circuit design. Digital Electronics™ is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, laptop computers, digital cameras, high definition televisions, etc. The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation. Students are also exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices. Utilizing the activity-project-problem-based (APPB) teaching and learning pedagogy, students analyze, design and build digital electronic circuits. While implementing these designs, students continually hone their interpersonal skills, creative abilities and understanding of the design process. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. Digital Electronics™ is one of several courses (AE, CEA, and CSP ) available for students in their 3rd year of the Project Lead the Way high school pre-engineering program.

## **AEROSPACE ENGINEERING (AE) (Course #H1033)**

GRADES 11, 12

Two semesters- 1 credit

Prerequisite: Introduction to Engineering Design

\*Weighted Course

Aerospace Engineering engages students in engineering design problems related to aerospace information systems, astronautics, rocketry, propulsion, the physics of space science, space life sciences, the biology of space science, principles of aeronautics, structures and materials, and systems engineering. Using 3-D design software, students work in teams utilizing hands-on activities, projects and problems and are exposed to various situations encountered by aerospace engineers. Aerospace Engineering is one of several courses (DE, CEA, and CSP ) available for students in their 3rd year of the Project Lead the Way high school pre-engineering program.

### **CIVIL ENGINEERING AND ARCHITECTURE (CEA) (Course #H1034)**

Grade Level: 11, 12

Two Semesters – 1 credit

Prerequisite: Introduction to Engineering Design

\*Weighted Course

The major focus of this course is for students to apply what they learn to the design and development of a property. Students work in teams as they explore hands-on activities and projects to learn important aspects of civil engineering and architecture. Students use 3D design software to help them design solutions to solve major course projects. Students document their project, solve problems, and communicate their solutions to their peers and members of the professional community of civil engineering and architecture. Civil Engineering and Architecture is one of several courses (AE, DE, and CSP ) available for students in their 3rd year of the Project Lead the Way high school pre-engineering program.

### **ENGINEERING DESIGN AND DEVELOPMENT (EDD) (Course #H1037)**

Grade Level: 12

Two Semesters – 1 credit

Prerequisite: Introduction to Engineering Design (IED) and Principles of Engineering (POE)

Recommendation: Concurrent enrollment in Formal Algebra II or higher and 1 additional PLTW course (AE, DE, CEA or CSP )

\*Weighted Course

In this capstone course, students work in teams to design and develop an original solution to a valid, open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel.

### ***PLTW Biomedical Sciences (Science Elective Credits)***

#### **PRINCIPLES OF BIOMEDICAL SCIENCES (PBS) (Course #H1041)**

GRADES 9, 10, 11, 12

Two semesters- 1 credit

\*Weighted Course

Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.

## **HUMAN BODY SYSTEMS (HBS) (Course #H1050)**

GRADES 10, 11, 12

Two semesters – 1 credit

Prerequisite: Successful completion or concurrent enrollment in Principles of Biomedical Sciences

\*Weighted Course

Students engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The systems are studied as “parts of a whole,” working together to keep the amazing human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real-world cases and play the role of biomedical professionals to solve medical mysteries.

## **MEDICAL INTERVENTION (MI) (Course #H1055)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Principles of Biomedical Science and Human Body Systems

\*Weighted Course

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

## **BIOMEDICAL INNOVATIONS (BI) (Course # H1057)**

GRADE 12

Two Semesters – 1 credit

Prerequisite: Successful completion of Medical Intervention

\*Weighted Course

Students design innovative solutions for the health challenges of the 21st century. They work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. Throughout the course, students are expected to present their work to an audience of STEM professionals.

## ***PLTW Computer Science (Practical Arts Credits)***

### **COMPUTER SCIENCE PRINCIPLES (Course #H1060)**

GRADES 9, 10, 11, 12

Two semesters- 1 credit

Recommendation: Successful completion of Introduction to Computer Science (ICS) for 9th grade students

\*Weighted Course

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, robotics, and simulation. This course aligns with the AP Computer Science Principles course.

**AP COMPUTER SCIENCE A** (See AP Computer Science under the Business or Technology departments)

*This is not a PLTW course.*

# Science Education



## PRINCIPLES OF NATURAL AND PHYSICAL SCIENCES (Course #H3002)

GRADE 9

Two semesters - 1 credit

Prerequisite: 8th Grade Teacher Recommendation

Principles of Natural and Physical Sciences is designed to help students learn about the science of the world around them. It exposes students to several different relevant science topics that will also help them to see what they are most interested in which will allow them to select the proper pathway within their science electives in high school. The course is designed to be inquiry-based and will help to foster both critical and scientific thinking skills.



### **BIOLOGY (Course #H3010)**

#### **9th BIOLOGY (Course #H3009)**

GRADES 9, 10, 11, 12

Two semesters - 1 credit

Prerequisite for Grade 9: 8th Grade Teacher recommendation

Prerequisite for Grade 10, 11, 12: Principles of Natural and Physical Sciences

Biology is a foundation to science education, teaching students how science applies to themselves and the world around them in a laboratory setting. Students will engage in inquiry based learning which includes: critical thinking, experimentation, interpreting and evaluating data, and the use of models. In Biology, students learn about experimental design, ecology, cells, DNA, genetics, and evolutionary change. Students will be required to take the Missouri End-Of-Course Exam upon completion of this course.

### **CHEMISTRY (Course #H3020)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Sophomore standing or above Recommendation: "C" average in Algebra I

In Chemistry, students will learn to use math in order to understand concepts in chemistry: energy, characteristics of matter, atomic structure, reactions and states of matter. Homework is assigned daily. It is recommended that students have a scientific calculator.

### **PHYSICS (Course #H3031)**

GRADES 10, 11, 12

Two Semesters – 1 credit

Prerequisite: Concurrent enrollment or successful completion of Algebra II, or Instructor Approval.

Physics is a science class designed for any college bound student. Many colleges recommend at least one course in physics be taken before a student graduates high school. Topics of study include: motion, projectile motion and ballistics, forces, electricity, waves, sound, and optics. Students will frequently participate in hands-on activities that develop both laboratory and problem solving skills.

### **INVESTIGATIONS IN BIOCHEMISTRY (Course #H3019)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Successful completion of Biology

Investigations in Biochemistry is a hands-on, lab-based course that integrates the major concepts of biology and chemistry into real-life scenarios. Students learn the major concepts by exploring scientific instruments, cells, chemistry, medical science, environmental science and forensic science. The class is structured to teach both science skills and workplace skills by analyzing and solving industry scenarios. Class work is done in small groups, so the ability to collaborate with others is necessary. This class is suitable for students who are college-bound and might not be interested in a science-based major.

## **EARTH AND SPACE SCIENCE (Course #H3017)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Successful completion of Biology

In Earth and Space Science, students engage in the study of natural and human impacts on the Earth, Earth's systems and Earth's place in the universe. The interdisciplinary field of Earth science includes topics in astronomy, atmospheric science, geology, oceanography, and human impact on the Earth. Students explore these fields of study through inquiry based activities such as labs, field experiences, and other hands-on approaches.

## **BOTANY AND THE DIVERSITY OF LIFE (Course #H3070)**

GRADES 10, 11, 12

One semester – 1/2 credit

Prerequisite: Successful completion of Biology

This course provides an introduction to the classification, relationships, structure, and function of Viruses, Bacteria, Protists, Fungi, and Plants. Topics include reproduction and development of seed and nonseed plants, levels of organization, form and function of systems, and a survey of major taxa in each Kingdom. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and nonseed plants. The laboratory exercises are coordinated with lecture topics and may include field exercises.

## **ZOOLOGY (Course #H3080)**

GRADES 10, 11, 12

One semester – 1/2 credit

Prerequisite: Successful completion of Biology

In Zoology, students examine the structure, function, growth, and development of animals. Students engage in a detailed study of invertebrates and vertebrates. The behavior and interactions of animals are analyzed throughout the course. Class activities will include discussions, projects, dissections, and lab-based experiences.

## **AP BIOLOGY (Course #H3015)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Successful completion of Biology and Chemistry

Recommendation: "B" in Biology and Chemistry

\*Weighted Course

Students develop advanced inquiry and reasoning skills, such as designing plans for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. Twenty-five percent of the course will be devoted to traditional and inquiry based labs. The AP Biology course is equivalent to a two-semester college introductory biology course. The course expands on concepts originally presented in Biology. Major topics include evolution, diversity and classification, biochemistry, cell structure and transport, cell communication, plant and animal behavior, metabolism, cell replication, heredity, molecular biology, and ecology. Upon completion of this course, students will be prepared to take the AP Biology Exam.

### **AP CHEMISTRY (Course #H3025)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Successful completion of Biology and Chemistry

Recommendation: "C" in Chemistry, "C" in Geometry, and successful completion of Algebra II.

\*Weighted Course

Students learn new concepts as well as expanded concepts originally presented in Chemistry. Major topics include atomic structure, bonding, kinetic theory, oxidation-reduction, chemical reactions and equilibrium, thermodynamics, as well as quantitative and qualitative analysis. The students spend at least 25% of their time completing traditional and inquiry based labs. It is recommended that students have a calculator with scientific functions. Upon completion of this course, students will be prepared to take the AP Chemistry Exam.

### **AP PHYSICS 1: ALGEBRA –BASED (Course #H3034)**

GRADES 10, 11, 12

Two semesters - 1 credit

Prerequisite: Students must fulfill 2 of the following:

- Concurrent enrollment or successful completion of Precalculus
- Completion of Algebra II with a minimum of "B" or higher both semesters
- Instructor Approval

\*Weighted Course

AP Physics 1 is a college level course that requires additional hours of study time outside of class hours. It is an algebra and trigonometry based course. Topics of study include: linear and rotational motion, circular motion, orbits, forces, torque, basic electrical circuits, oscillations, mechanical waves, sound, and the superposition of wave pulses. Laboratory investigations will be extensively used in the development of all concepts presented in this course. This course is strongly suggested for those students considering entering any field of science or engineering. Upon completion of this course, students will be prepared to take the AP Physics 1 Exam.

### **AP PHYSICS 2: ALGEBRA-BASED (Course #H3038)**

GRADE 11, 12

Two semesters – 1 credit

Prerequisite: AP Physics 1 or instructor approval

\*Weighted Course

AP Physics 2 is a continuation of AP Physics 1. It is a college level physics course that has its basis in algebra and trigonometry. Topics of study include: motion and dynamics of charges and subatomic particles, electricity and magnetism, fluids, thermodynamics, modern physics, electromagnetic waves, and optics. Reviewing for the AP Physics 2 Exam is incorporated throughout this course. Laboratory investigations are extensively used in the development of all concepts presented in this course. This course is strongly suggested for those students considering entering an engineering, physics, medicine, or STEM related field. Upon completion of this course, students will be prepared to take the AP Physics 2 Exam.

### **FORENSIC SCIENCE (Course #H3050)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Successful completion of Biology and Chemistry

Forensic Science is designed around authentic performance assessments with students working in teams to perform techniques used in crime laboratories to solve crimes using scientific knowledge and reasoning. It involves all areas of science including Biology, Anatomy, Chemistry, Physics, and Earth Science with an emphasis in complex reasoning and critical thinking. In addition, students must incorporate the use of technology, communication skills, language arts, art, family and consumer science, mathematics, and social studies.

### **ANATOMY AND PHYSIOLOGY (Course #H3060)**

GRADES 11, 12

Two semesters - 1 credit

Prerequisite: Successful completion of Biology and Chemistry or consent of instructor

Recommendation: "B" average in Chemistry and Biology

\*This course may be available for college credit through UM-St. Louis. Please see your counselor or instructor for details.

\*Weighted Course

Students explore the relationships among the key body systems. This is accomplished by laboratory activities, dissections, and authentic assessments. Students develop an understanding of system functions and the interrelationship between the major body systems.

### **ENVIRONMENTAL SCIENCE (Course #H3040)**

GRADES 11, 12

Two Semesters - 1 credit

Prerequisite: Biology or teacher recommendation

Recommendation: "B" average in Biology

In Environmental Science, students will learn about conservation practices and sustainability. Students will learn about biodiversity including: levels of organization in the biosphere, and how organisms interact with each other and the environment. Students will also learn about different types of pollution, hazards to human health, climate change, and changes to the earth's environment caused by human and natural factors. Likewise, students will study how population growth impacts land usage, agriculture, and other available resources.

### **AP ENVIRONMENTAL SCIENCE (Course #H3045)**

GRADES 11, 12

Prerequisite: Successful completion of Biology and Chemistry

Note: A student does NOT have to complete Environmental Science before taking AP Environmental Science

\*Weighted Course

AP Environmental Science is a rigorous science course that stresses scientific principles while emphasizing the study of environmental issues from an ecological, economical, and social perspective. The goal of AP Environmental Science is to provide students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Class activities include lecture, small and large group discussions, lab and field investigations, and debate. Upon completion of this course, students will be prepared to take the AP Environmental Science Exam.

### **INDEPENDENT SCIENCE RESEARCH (Course #H3095)**

GRADES 11, 12

Two semesters – 1 credit

Prerequisite: Students must have completed both Biology and Chemistry with a “B” or higher. Enrollment in an AP Science course is not required but is strongly recommended.

In addition, students must complete an application for the course, submit a minimum of 2 letters of reference (one of which must be from a science teacher), and go through an interview with the instructor. Due to the intensity of the supervision/guidance required in this course, enrollment will be limited to 10 students.

\*Weighted Course Independent Science Research offers advanced science students the opportunity to explore areas of science that they may not otherwise be able to explore within the confines of a traditional science course. The course will emphasize analysis and critical thinking skills, as well as application of the scientific method. The course will also foster the ability to work and think independently. Students will be required to complete a research project of their choice as well as a formal research paper. The project and paper are intended for submission to area science competitions.

### ***PLTW Biomedical Sciences (Science Elective Credits)***

#### **PRINCIPLES OF BIOMEDICAL SCIENCES (PBS) (Course #H1041)**

GRADES 9, 10, 11, 12

Two semesters- 1 credit

\*Weighted Course

Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person’s life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. This course is designed to provide an overview of all the courses in the Biomedical Sciences program and lay the scientific foundation for subsequent courses.

## **HUMAN BODY SYSTEMS (HBS) (Course #H1050)**

GRADES 10, 11, 12

Two semesters – 1 credit

Prerequisite: Successful completion or concurrent enrollment in Principles of Biomedical Sciences

\*Weighted Course

Students engage in the study of the processes, structures, and interactions of the human body systems. Important concepts in the course include: communication, transport of substances, locomotion, metabolic processes, defense, and protection. The systems are studied as “parts of a whole,” working together to keep the amazing human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real-world cases and play the role of biomedical professionals to solve medical mysteries.

## **MEDICAL INTERVENTION (MI) (Course #H1055)**

GRADES 11, 12

Two Semesters – 1 credit

Prerequisite: Principles of Biomedical Science and Human Body Systems

\*Weighted Course

Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the life of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body. Students explore how to prevent and fight infection; screen and evaluate the code in human DNA; prevent, diagnose and treat cancer; and prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

## **BIOMEDICAL INNOVATIONS (BI) (Course # H1057)**

GRADE 12

Two Semesters – 1 credit

Prerequisite: Successful completion of Medical Intervention

\*Weighted Course

Students design innovative solutions for the health challenges of the 21st century. They work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project with a mentor or advisor from a university, hospital, research institution, or the biomedical industry. Throughout the course, students are expected to present their work to an audience of STEM professionals.

# ***Social Studies Education***

History is the memory of human group experience. If it is forgotten or ignored, we cease in that measure to be human. Without history we have no knowledge of who we are or how we came to be. As students progress through high school, they will further their understanding of the idea that history is not a series of isolated events; rather it reflects an integration of all aspects of humanity (philosophy, science, art, literature, music, technology, culinary expression, religion). In addition, all Social Studies courses will focus on one or more of the following enduring understandings:

- One person really can make a difference (positive and/or negative).
- Geography plays a crucial role in development of culture, civilization, economics, politics and religion.
- Different perspectives (including motive, bias, and prejudice) impact the translation of events throughout time.
- In government, when the balance of power shifts, conflict ensues.
- A society's culture is reflected through and impacted by different mediums.
- Globalization, economics, and governments impact individuals and society.

## **WESTERN CIVILIZATION (Course #H2012)**

GRADE 9

One Semester – 1/2 credit

This survey course will examine important historical developments in European civilization from The Renaissance through World War II. Students will examine the social, political, and economic factors that have influenced decision making and global events that are the precursors to the world we live in today. Particular areas of study include the Renaissance and Reformation, Age of Exploration, Age of Reason, French Revolution and Napoleonic Era, Industrial Revolution, Imperialism, WWI, and WWII. This is the standard introductory class for incoming freshmen.

## **CULTURAL GEOGRAPHY (Course #H2022)**

GRADE 9

One Semester - 1/2 credit

Cultural Geography provides students with an understanding of the spatial distributions of cultures and the processes that led to these unique cultures and their distribution. This course is an interdisciplinary approach to geography. It will integrate the 5 themes of Geography: location, place, region, movement, and human-environment interaction to better understand the world's unique cultures. It is designed to provide the student with a core of knowledge about the world's geographical regions and to relate the knowledge to events in today's rapidly changing world. Activities will include readings, map work, lecture, videos, discussions, small projects, and a capstone project.

## **ADVANCED HISTORY: FROM MIDDLE AGES TO MODERN ERA (Course #H2016)**

GRADE 9

Two Semesters – 1 credit

Prerequisite: Recommendations of 8th grade Communication Arts and Social Studies teachers

Advanced History from Middle Ages to the Modern Era introduces students to the historical thinking skills of Advanced Placement history courses through the study of major developments and events in European and World History. By examining these events, students will be able to make connections to issues affecting the world today. This course will provide students with the foundation needed to take AP history courses.

## **AP EUROPEAN HISTORY (Course #H2005)**

GRADES 9, 11, 12

Prerequisite for incoming 9th grade students: Recommendations of 8th grade English Language Arts and Social Studies teachers. \*\*Students must have strong skills in reading comprehension and writing

\*Weighted course

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

## **UNITED STATES HISTORY (Course #H2042)**

GRADE 10

Two Semesters - 1 credit

\*Required for graduation

This is a survey course that examines the history of our country from the Civil War to the present day. The emphasis will be placed on historical content, critical graphs, comparing and drawing maps, analyzing paintings, photographs and political cartoons, understanding economic concepts and making inferences and hypotheses.

## **AP UNITED STATES HISTORY (Course #H2049)**

GRADES 10, 11, 12

Two Semesters - 1 credit

\*Satisfies the US History Graduation Requirement

\*Weighted Course

This course is an in-depth study of United States History and meets the United States History requirement for 10th grade. In AP United States History, students learn to assess historical materials—their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. Students in this course will develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format. The class is centered on lecture and discussion, with periodic trips to the library included. Upon completion of this course, students may elect to take the AP Exam in US History.



## **UNITED STATES GOVERNMENT (Course #H2032)**

GRADE 11

Two Semesters – 1 Credit

\*Required for graduation

In this course the students will study our political system by examining the institutions, branches, and functions of federal, state, and local governments, as well as the factors that influence this system, such as the electoral process and political parties. Students will learn the responsibilities and duties of citizens in a democratic society and how, as citizens, they can influence the decisions of government. Students must take and pass the United States Constitution test and the Missouri Constitution test, as required for graduation. In addition, students will be required to take the Missouri End-Of-Course exam upon completion of this course.

## **AP UNITED STATES GOVERNMENT & POLITICS (Course #H2045)**

GRADES 11, 12

\*Satisfies the US Government Graduation Requirement

\*Weighted course

The AP United States Government and Politics course will give students an analytical perspective on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Upon completion of this course, students may elect to take the AP Exam in Government and Politics. In addition, if students elect to take AP US Government & Politics to satisfy the US Government requirement, they will be required to take the Missouri End-Of-Course exam upon completion of this course.

## **AP WORLD HISTORY (Course #H2015)**

GRADES 11, 12

Two semesters – 1 credit

\*Weighted Course

The purpose of AP World History is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. This course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant, factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Upon completion of this course, students may elect to take the AP World History exam.

### **AP MACROECONOMICS (Course #H2065)**

GRADES 11, 12

One Semester – ½ credit

\*Weighted Course

The purpose of an AP course in macroeconomics is to give students a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course places particular emphasis on the study of national income and price level determination and also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth and international economics. Upon completion of this course, students may elect to take the AP Macroeconomics exam.

### **AP MICROECONOMICS (Course #H2067)**

GRADES 11, 12

One Semester – ½ credit

\*Weighted Course

The purpose of the AP course in microeconomics is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and of the role of government in promoting greater efficiency and equity in the economy. Upon completion of this course, students may elect to take the AP Microeconomics exam.

### **AP PSYCHOLOGY (Course #H2055)**

GRADES 11, 12

Two Semesters – 1 credit

\*Weighted Course

The AP Psychology course introduces students to the systematic and scientific study of behavior and mental processes of human beings and other animals. Students are exposed to major psychological facts, principles, and phenomena associated with each of the major fields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

### **PSYCHOLOGY (Course #H2051)**

GRADES 11, 12

One Semester - ½ credit

Recommendation: A minimum 2.5 cumulative GPA.

In this survey course, major emphasis will include examination of learning theory, intellectual ability, personality theory, mental and personality disorders and defining vocabulary terms used in Psychology.

### **SOCIOLOGY (Course #H2050)**

GRADES 11, 12

One Semester - 1/2 credit

Recommendation: A minimum 2.5 cumulative GPA.

The major emphasis will be on the development, changes, and behavioral patterns which occur in groups within a society. Individual motivation is a prerequisite for this course, as is a willingness for discussion and presenting ideas to the class.

### **CONTEMPORARY ISSUES (Course #H2060)**

GRADES 11, 12

One Semester - 1/2 credit

This course examines the social problems of our time. These topics include, but are not limited to crime, terrorism, international and domestic affairs as well as geopolitical problems of the world. Students will use the Internet as a resource for research tasks. Supplementary materials will be used to enhance the learning experience. Throughout this course the students will develop computer skills, analytical and critical thinking skills as well as an understanding of the impact of social issues on their lives.

### **CRIMINAL JUSTICE (Course #H2066)**

GRADES 11, 12

One Semester – 1/2 credit

The purpose of Criminal Justice is to provide the student with the knowledge, interest and tools to resist injustice, to resolve disputes, and to secure change peaceably within society. In this course, students will investigate current issues and trace the events within criminal justice as they study policing, adjudication and corrections.

### **SPORTS AND SOCIETY (Course #H2062)**

GRADES 11, 12

One Semester - 1/2 credit

Sports represent the attitudes, values, and beliefs of a given society. This semester-long, elective course provides a fundamental working knowledge of the emergence of sports as a critical component in modern society. Students will trace the history of sports from its origins to the current trends affecting sports and our society, including, but not limited to, the influence of politics, money, and criminal activity.

## **AMERICAN POPULAR CULTURE (Course #H2063)**

GRADES 11, 12

One semester – ½ credit

Popular culture is such an integral part of our lives that it is easily taken for granted. This course is based on the assumption that a close examination of popular culture can illuminate an understanding of some of these fundamental issues—formation of communities, courtship rituals, immigration, urbanization, race relations, gender issues, the generation gap, the commercialization of pop culture and the growth of mass media. This course will explore popular American culture and its impact on history, connecting such key themes as jazz, rock, hip-hop, dance, fashion & television with major social topics in history. An emphasis is placed on critical writing skills throughout the course. In addition, students will be responsible for conducting their own independent research. No previous knowledge of music history or theory is required

# ***St. Charles County Center for Advanced Professional Studies (CAPS)***

St. Charles County CAPS provides high school students in St. Charles County with a pre-professional, innovative and entrepreneurial education through career-oriented experiences that are both hands-on and real-world. St. Charles County CAPS students are immersed in professional environments, engaging in curriculum developed by industry professionals and program instructors - ensuring that what is taught in the classroom is relevant to the workforce. Learning is enhanced by project work direct from industry partners who engage to mentor students and ensure timely, accurate and real project results.

Learning at St. Charles County CAPS is real-time, real-world, and hands-on. Emphasis is placed on developing professional skills, such as communication and collaboration, which employers deem highly important to individual success.

Students attend the CAPS program for half of their school day and the other half is at their home school. The morning CAPS session is from 7:30 AM to 10 AM and the afternoon session is from 12 PM - 2:30 PM. **Students who participate in St. Charles County CAPS must provide their own transportation to and from their home school and the business site. 95% attendance is expected to remain in the course.**

**A complete application is required to apply. CAPS interviews may occur as well for strand placement purposes. The SCC CAPS application and deadline to apply can be found under Enrollment on the SCC CAPS website - [scccaps.org](http://scccaps.org).**

**Global Business/Entrepreneurship** - *Examine innovation as a business activity and develop project management skills as you work with clients to solve real-world problems*

**Prerequisite:** None

**Overview:** This course strand is designed for students to create real startup ventures and solve real business needs. They will be mentored by real employers and gain marketable professional skills in an off-campus location. This course will provide students a challenging, innovative, authentic, experiential learning environment that allows them to discover personal passions. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Their growth mindset and confidence will increase. Students will learn startup principles and develop an entrepreneurial mindset. They will turn ideas into actions, by validating their ideas, perfecting a pitch, and seeking resources and opportunities for a product or service. Students will also work with organizations to work on projects that solve real needs. This course culminates in an instructor-student agreed upon capstone project and internship showcasing their work in this exciting field of study. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course.***

**Classroom Location for 2018 - 2019:**

- Stauder Technologies (M, T, R, & F)  
114 Mexico Court  
St. Peters, MO 63376
- Economic Development Center of St. Charles County (Wednesdays only)  
5988 Mid Rivers Mall Drive  
St. Peters, MO 63376

**High School Credit Offered:**

- 1.5 practical arts credits each semester

**College Credit Offered:**

- Lindenwood University
  - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
  - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

**Healthcare** - Explore a variety of healthcare career fields through coursework, shadowing opportunities, projects and internships

**Prerequisite:** None (Anatomy & Physiology/PLTW Human Body Systems or equivalent preferred)

**Overview:** This course strand is ideal for students who intend to go into a medical field. Students will engage in the team approach of healthcare at hospitals and/or healthcare facilities, giving students actual experience with health practitioners. Students will have the opportunity to learn about a variety of careers in the medical field, from medical practitioner to hospital administrator. Students will participate in medical training and clinical presentations prior to participating in clinical observational rotation assignments. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Students will learn about Safety, HIPAA, CPR, and Basic First Aid competencies. In addition, students will have a capstone project. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course.***

**Classroom Location for 2018 - 2019:**

- Vatterott College  
3550 West Clay Street  
St. Charles, MO 63301

**Hospitals:**

- BJC Progress West Hospital
- BJC St. Peters Hospital
- SSM Health St. Joseph Hospital - Lake St. Louis
- SSM Health St. Joseph Hospital - St. Charles

**High School Credit Offered:**

- 1.5 science credits each semester

**College Credit Offered:**

- Lindenwood University
  - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
  - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

**Technology Solutions** - *Be immersed in professional environments where technology is utilized to design products and solve business problems*

**Prerequisite:** None (PLTW Computer Science or related business or graphic design courses *preferred*)

### **Technology Solutions - Information Technology**

**Overview:** This course strand is designed for students interested in developing professional and technical skills required for careers in various areas of information technology. Students will be provided a challenging, innovative, authentic, experiential learning environment that allows them to discover personal passions. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Students will have the opportunity to explore the following areas as they relate to PCs and mobile devices: software engineering, web development, operating systems, hardware technologies, network design/technologies, management information systems, and emerging technologies. Students will perform real-world projects for clients utilizing the expertise of diverse guest instructors, mentors, and business partners. Students will collaborate with mentors and business partners to produce client projects and design their own products or prototypes, as well as solve real-world problems. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course.***

### **Technology Solutions - Creative Media**

**Overview:** This course strand is designed for students interested in developing professional and technical skills required for careers in various areas of creative media. Students will be provided a challenging, innovative, authentic, experiential learning environment that allows them to discover personal passions. Students will develop professional skills that are necessary to thrive in collaborative, innovative, and fast-paced environments. Students will have the opportunity to explore the following areas as they relate to creative media: video production, graphic design, audio production, and digital photography. Students will perform real-world projects for clients utilizing the expertise of diverse guest instructors, mentors, and business partners. Students will collaborate with mentors and business partners to produce client projects and design their own products or prototypes, as well as solve real world problems. ***Students must provide their own transportation to and from the business site. 95% attendance is expected to remain in the course.***

### **Classroom Location for 2018-2019:**

- Charter Spectrum at Riverport Tower  
13736 Riverport Drive Maryland Heights, MO 63043

### **High School Credit Offered:**

- 1.5 practical arts credits each semester

### **College Credit Offered:**

- Lindenwood University
  - **Profession-Based Essentials (1 credit hour):** A profession-based skills development course that prepares students for a profession-based work experience, internship, or practicum.
  - **Profession-Based Work Experience (1-3 credit hours):** A profession-based work experience that enables students to work within a business context, clarify their career goals, and develop their professional skills under the supervision, guidance, and mentoring of an industry professional. Credit will vary depending upon time spent. One hour of credit requires 50 hours of work time.

# ***Student Leadership***

## **STUDENT LEADERSHIP I (Course #H2080)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: A minimum of 2.5 GPA per semester and consent of the instructor.

\*This course counts as an elective credit only.

This is a yearlong course with a major emphasis on developing personal leadership skills and an understanding of group processes. Development of organizational, public speaking, and interpersonal communication skills will be stressed through the use of practical school situations.

## **STUDENT LEADERSHIP II (Course #H2082)**

GRADES 11, 12

Two Semesters - 1 credit

Prerequisite: Student Leadership I, a minimum of 2.5 GPA per semester, and consent of the instructor.

\*This course counts as an elective credit only.

This course is designed for students who have demonstrated advanced abilities necessary to identify, practice and master skills in planning and carrying out a variety of school projects. Students will improve their leadership skills through constant practice with an emphasis on goal setting, problem solving and creative thinking.

## **ADVANCED STUDENT LEADERSHIP (Course #H2085)**

GRADE 12

Two Semesters - 1 credit

Prerequisite: Student Leadership II, a minimum of 2.5 GPA per semester, and consent of the instructor.

\*This course counts as an elective credit only.

This course is for students who have demonstrated exceptional leadership skills and abilities necessary to oversee a committee or a commissioner's planning, and to carry out a variety of school projects. The course will expand skills learned in Student Leadership I and II.



# ***Student Publications & Broadcast***

## **INTRODUCTION TO JOURNALISM (Course #H1154)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

\*This course is an elective and will not count towards fulfillment of the English Language Arts requirement for graduation.

Introduction to Journalism introduces all types of modern journalistic techniques used in a variety of authentic news publications. This course is the foundation for the Broadcast Media, Magazine, Online News and Yearbook courses. Students will learn the basics of journalistic history, ethics, writing, photography, broadcasting and design. Introduction to Journalism benefits all students, including those who do not plan to pursue a career in journalism, as they explore team-building, troubleshooting, critical thinking and the creative process.

## **BROADCAST MEDIA (Course #H6135)**

Grades 10, 11, 12

Two Semesters - 1 credit

Prerequisites: Introduction to Journalism, Multimedia (may be enrolled concurrently in Multimedia) or Teacher Recommendation

Note: This course can be taken more than once.

\*This course is an elective and will not count towards fulfillment of the English Language Arts requirement for graduation.

Explore the world of audio/visual storytelling in an authentic, journalistic based, studio environment! Broadcast media allows students to pursue their interests in behind the scenes and/or in on screen experiences for various audiences in the school, across the district, and throughout the community. Experiences in this class may include (but will not be limited to) script writing, storyboarding, filming, editing, and promoting content.

## **MAGAZINE (Course #H1145)**

Grades 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Introduction to Journalism or Teacher Recommendation

Note: This course can be taken more than once.

\*This course is an elective and will not count towards fulfillment of the English Language Arts requirement for graduation.

Magazine (formerly Newspaper I and II) engages students in the production of regular feature and news content through the construction of a series of magazines. Students will use journalistic skills such as interviewing, writing, photography and page design. This course allows students to pursue their interests in print media and design through all aspects of school coverage, including after school events (such as sporting events, plays, clubs and other extracurricular activities).

## **ONLINE NEWS (Course #H1147)**

Grades 10, 11, 12

Two Semesters - 1 Credit

Prerequisite: Introduction to Journalism or Teacher Recommendation

Note: This course can be taken more than once.

\*This course is an elective and will not count towards fulfillment of the Communication Arts requirement for graduation.

Online news (formerly Newspaper I and II) engages students in the production of regular news content through the use of the school online news site. Students will use journalistic skills such as interviewing, writing, videography and web design. This course allows students to pursue their interests in news media in all aspects of school news coverage, including after school events (such as sporting events, plays, and other extracurricular activities).

Links to individual school news sites:

[Lhstoday.org](http://Lhstoday.org)

[Holttribe.com](http://Holttribe.com)

[Wolfshowl.com](http://Wolfshowl.com)

## **YEARBOOK (Course #H1160)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Prerequisite: Introduction to Journalism or Teacher Recommendation

\*This course is an elective and will not count towards fulfillment of the Communication Arts requirement for graduation.

Yearbook (formerly Yearbook I and II) engages students in the production of feature content through the construction of the annual school yearbook. Students will use journalistic skills such as interviewing, writing, photography and page design to fully capture the activities and events across the entire school year. This course allows students to pursue their interests in print media and design through all aspects of school coverage, including after school events (such as sporting events, plays, clubs and other extracurricular activities). Additionally, students will be required to sell ads and yearbooks.

# *Study Hall*

## **STUDY HALL (Course #H8500)**

Grades 9, 10, 11, 12

One Semester - 0 Credit

**Please Note: Study Hall is only available as an Alternate Course choice.**

This non-credit bearing class provides students with the opportunity to complete homework, study for quizzes and tests, and complete any other school related work. Prior to requesting this course, please be sure to consult the [Wentzville School District Graduation Requirements](#) as well as the [MSHSSA academic requirements](#) (if applicable). In addition, because no credit is earned in this course, it is important that parents/guardians be involved in the decision regarding this request.

# *Technology*

## **BUSINESS TECHNOLOGY (Course #H6182)**

GRADES 9, 10, 11, 12

Two Semesters – 1 credit

Explore the world of business and become advanced users of technology including Microsoft Office, Google Drive and other online applications. This course is designed to develop the knowledge, and skills required for the Microsoft Office Specialist (MOS) certification tests. This technology class is critical for college and workplace readiness. Students will learn how to make technology work for them and help them excel in their courses in high school, college, and careers. Technology will be utilized to solve problems and complete tasks efficiently and effectively regardless of previous experience with technology. Students participate in simulations with real word experiences such as event planning, project management, data analysis, social media etiquette, and variety of presentations to enhance all forms of effective communication. Students get an in depth knowledge of advanced word processing, spreadsheets, database management, presentations, and desktop publishing. Other technology concepts are explored including but not limited to web design, email communication, Internet and social media etiquette. In addition to satisfying the practical art requirement for graduation, this course is the prerequisite for many other technology courses and appropriate for all grade levels.

## **COMPUTER SCIENCE PRINCIPLES (CSP) (Course #H1060)**

GRADES 9, 10, 11, 12

Two semesters- 1 credit

Recommendation: Successful completion of Introduction to Computer Science (ICS) for 9th grade students

\*Weighted Course

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. This course helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, robotics, and simulation. This course aligns with the AP Computer Science Principles course. This is a Project Lead the Way (PLTW) course.

## **AP COMPUTER SCIENCE A (Course #1062)**

GRADES 10, 11, 12

Two semesters – 1 credit

Prerequisite: Computer Science Principles or Computer Programming

\*Weighted Course

Computer science embraces problem solving, hardware, algorithms, and perspectives that help people utilize computers to address real-world problems in contemporary life. As the study of computer science is evolving, the careful design of the AP Computer Science A course and exam continues to strive to engage a diverse student population, including female and underrepresented students, with the rigorous and rewarding concepts of computer science. Students who take the AP Computer Science A course and exam are well prepared to continue their study of computer science and its integration into a wide array of computing and STEM-related fields.

## **DESKTOP PUBLISHING I (Course #H6131)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Business Technology or Computer Applications I

Students will explore and become proficient users of graphic arts/desktop publishing software to produce creative and effective business documents such as promotional items, newsletters, brochures, etc. In this course, students will utilize Adobe InDesign, Illustrator and Photoshop. An emphasis will be placed on editing photos, working with text and colors, adjusting and filtering images, and creating professional quality documents.

## **DESKTOP PUBLISHING II (Course #H6132)**

Grades 10, 11, 12

One semester-1/2 credit

Prerequisite: Desktop Publishing I

A computerized course designed to prepare students for advanced course work that can be applied to college and the workplace for employment in career areas which include graphic arts/desktop publishing skills. Demand in these areas is rising as businesses utilize advanced graphic arts skills to increase their production efficiency and improve the creativity and quality of business documents and publications. Students will become advanced users of Adobe Illustrator, Photoshop, InDesign and be introduced to a variety of other Adobe products including Premiere, Fireworks, and Acrobat. Skills will be attained to design and edit computer graphics and images as well as concentrate on graphic manipulation and photo editing.

## **MULTIMEDIA (Course #H6130)**

GRADES 10, 11, 12

Two Semesters - 1 Credit

Prerequisite: Business Technology or Computer Applications I

This two-semester course addresses the technology knowledge and skills required of students entering the workplace. The demand will continue to expand as businesses utilize multimedia functions including graphics, audio, video, web page design and maintenance, and electronic presentation skills. Students will work individually and in team situations. Students will be exposed to Adobe Photoshop, Soundbooth, Premiere Pro, and Dreamweaver.

## **BROADCAST MEDIA (Course #H6135)**

Grades 10, 11, 12

Two Semesters - 1 Credit

Prerequisites: Introduction to Journalism, Multimedia (may be enrolled concurrently in Multimedia) or Teacher Recommendation

Note: This course can be taken more than once.

Explore the world of audio/visual storytelling in an authentic, journalistic based, studio environment! Broadcast media allows students to pursue their interests in behind the scenes and/or in on screen experiences for various audiences in the school, across the district, and throughout the community. Experiences in this class may include (but will not be limited to) script writing, storyboarding, filming, editing, and promoting content.

## **WEB DESIGN (Course #H6133)**

GRADES 11, 12

One Semester - 1/2 Credit

Prerequisite: Multimedia

In this one-semester web design course, students complete several guided projects and then develop their own website. Web design essentials are covered throughout in examples and activities. Students will plan a website and move into storyboarding, page design, layout and template issues. From there, students learn to create backgrounds, headers, and buttons. Students learn to use templates, create rollovers and pop-ups, develop image maps, and add animations. Students will be exposed to Adobe Fireworks, Dreamweaver and Flash. Students will gain hands-on experience with real-world websites.

### **ADVANCED BUSINESS TECHNOLOGY (Course #H6185)**

GRADE 12 Two Semesters – 1 credit

Prerequisite: Desktop Publishing II

This two-semester course is a continuation of Business Technology to refine work processing and office skills needed for an entry-level job and/or continuation into advanced college courses needing work processing skills. Desktop publishing is extensively covered.

### **BUSINESS AND OFFICE INTERNSHIP (Course #H6140)**

GRADES 11, 12

Two Semesters – 1/2 to 1 credit (depending upon number of hours worked)

Prerequisite: Instructor approval and 2.0 GPA or higher \*Must also be enrolled in one of the following: Accounting, Business Technology, Advanced Business Technology, Multimedia, Desktop Publishing I or II or Web Design Students earn high school credit while being trained on-the-job. Students must provide own transportation to and from work.

Students earn 1/2 credit per semester for working 10 hours per week or 1 credit for over 20 hours per week. Students may not change jobs without teacher approval. If a student loses a job, the following formula will be used to calculate a final grade: Number of hours the student worked divided by 180 (hours for 1/2 credit) or 360 (hours for one credit) plus percentage grade earned divided by 2.

### **COMPUTER HARDWARE & INFORMATION TECHNOLOGY (Course #H6160)**

GRADES 11, 12

Two semesters – 1 credit

Prerequisite: Any high school technology course, Lewis & Clark course, or PLTW Computer Science/Engineering course AN APPLICATION IS REQUIRED FOR ADMITTANCE INTO THIS COURSE

In this course students will learn and perform the skills of a computer technician for the high school. Students will be required to assess computer hardware and software problems and define the best approach to addressing or solving the problem. In addition to solving problems for their classmates and teachers, students will be required to complete and maintain inventory and tracking of work orders. Students will pursue CompTIA A+ certification in a self-paced environment or complete school based technology projects. Acquiring customer service skills will be emphasized.

# *Theatre*

## **TECHNICAL THEATRE I (Course #H1188)**

GRADES 9, 10, 11, 12

One semester: ½ credit (practical art)

Technical Theatre I introduces students to the backstage world of theatre! Students will engage in hands-on experiences with special effects makeup, scenic painting techniques, and prop construction. Additionally, students will have the opportunity to engage in other facets of theatre including marketing and publicity in order to gain an appreciation for the function and operation of the theatre.

## **TECHNICAL THEATRE II (Course #H1189)**

GRADES 9, 10, 11, 12

One semester: ½ credit (practical art)

Prerequisite: Technical Theatre I

Technical Theatre II continues the fun of Tech I! Students delve further into the backstage world of theatre as they learn more about the roles and responsibilities of stage technicians and designers. Students experience the process of design from initial idea to realization of final product in a variety of areas such as lighting, sound, costumes, and set construction.

## **TECHNICAL THEATRE III (Course #H1190)**

GRADES 10, 11, 12

Two semesters: 1 credit (practical art)

Prerequisite: Technical Theatre I & Technical Theatre II

Note: This course can be taken more than once.

Technical Theatre III elaborates on the fun from Tech I & Tech II. In this year long course, students will take on the role of designers and crew heads for the main stage productions. Students will be afforded opportunities to engage in the design process from conceptualization to realization of multiple projects in multiple areas of theatre. This course is designed with the student in mind who is considering technical theatre as a career path. Thus, in addition to hands-on design experiences, students will work on portfolio development and presentation.

## **THEATRE ARTS I (Course #H1186)**

GRADES 9, 10, 11, 12

One Semester - ½ credit

Theatre Arts I is a course that looks at the field of theatre through the study of various performance techniques such as improvisation, pantomime, and storytelling. Students also learn about theatre through the study of theatre history, theatre terminology, and theatre careers.

## **THEATRE ARTS II (Course #H1187)**

GRADES 9, 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Theatre Arts I

This course builds upon the knowledge learned in Theatre Arts I. It continues the study of theatre through various performance techniques, theatre terminology, modern theatre development, musical theatre and the mechanics of putting together a show.

## **ACTING (Course #H1182)**

GRADES 10, 11, 12

One semester - 1/2 credit

Prerequisite: Theatre Arts I and II or consent of instructor

Note: This course may be taken more than once.

Acting is designed for the student who is serious about improving his or her acting skills. In this course, creating multi-dimensional characters is emphasized. Students engage in thorough exploration and analysis of scripts in order to understand and develop character. In addition, significant focus is placed on developing a diverse portfolio to be prepared for future opportunities (auditions/productions/college).

## **IMPROVISATION AND SKETCH COMEDY (Course #1183)**

GRADES 10, 11, 12

One Semester - 1/2 credit

Prerequisite: Theatre Arts I & II and consent of the instructor.

Note: This course may be taken more than once.

Improvisation & Sketch Comedy offers actors the improvisational techniques required to inspire spontaneity and creativity. Students will study the fundamentals of improvisation through exercises that help to develop strong ensemble and character work as well as a respect for other performers and their creativity. Students will be able to create characters, relationships, scenes, and performance pieces based on the truth of the moment by following the CORE model-Character, Objective, Relationship, and Environment. Students will develop a program through improvisation and fine tune their ideas through a revision process as they create the scripts needed to perform a sketch comedy show. Excellent attendance is essential for success in Improvisation & Sketch Comedy.



# *World Languages*

Language and communication are the heart of the human experience. Students who study world languages in the Wentzville School district will do so through the exploration of six themes: Family & Communities, Contemporary Life, Beauty & Aesthetics, Global Challenges, Science & Technology and Personal & Public Identities. In addition, as students progress through the World Language program in the Wentzville School District, they will develop the following enduring understandings:

- The understanding and embracing of other cultures and languages leads to effective communication with the entire world.
- Language learning is a life-long process that provides opportunities for risk-taking and personal growth.
- Learning world languages will build community relations, broaden horizons, and open doors to new opportunities and careers.
- Sharing one's appreciation of world languages and cultures fosters sensitivity to differences between cultures.

## **LEVEL I WORLD LANGUAGE (French Course #H1210; German Course #H1220; Spanish Course #H1230)**

GRADES 9, 10, 11, 12

Two Semesters - 1 credit

Recommendation: "C" average in previous English courses (8th grade English or English I, II, or III).

Students in Level I French, German or Spanish will acquire the basic vocabulary and grammatical structures of the language through comprehensible input. Students will demonstrate language acquisition, cultural awareness and will explore the six major themes through the Interpersonal mode, Interpretive mode and Presentational mode.

## **LEVEL II WORLD LANGUAGE (French Course #H1212; German Course #H1222; Spanish Course #H1232)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Recommendation: "C" average in Level I

Students in Level II French, German or Spanish will further develop their vocabulary and will deepen their understanding of the grammatical structures of the language through comprehensible input. Students will demonstrate language acquisition, cultural awareness and will explore the six major themes through the Interpersonal, Interpretive, and Presentational modes.

## **ADVANCED LEVEL II WORLD LANGUAGE (French Course #H1213; German Course #H1223; Spanish Course #H1233)**

GRADES 10, 11, 12

Two Semesters - 1 credit

Recommendation: Minimum "B" average in Level I

Like Level II World Language, students in Advanced Level II World Language will demonstrate language acquisition, cultural awareness and will explore the six major themes through the Interpersonal, Interpretive, and Presentational modes. In the Advanced Level II French, German or Spanish courses, students will begin preparing for AP Language and Culture courses by working to further develop vocabulary and will deepen their understanding of grammatical structures of the language through comprehensible input.

**ADVANCED LEVEL III WORLD LANGUAGE (French Course #H1214; German Course #H1224; Spanish Course #H1234)**

GRADES 11, 12

Two Semesters - 1 credit

Recommendation: "B" average in Advanced Level II World Language or "A" average in Level II World Language

The Advanced Level III language course is an essential building block for any AP World Language course. Students will continue to build their vocabulary and will deepen their understanding of the target culture and of the grammatical structures of the language. Through continuous speaking, writing and reading in the target language, students will begin to fine tune their use of the language. Discussion, reading and writing will center on the six major themes and students will continue to demonstrate their competency and skill through the Interpersonal, Interpretive, and Presentational modes. Because this course provides the foundation for AP World Language, students must be prepared to dedicate time to learning the extensive amount of vocabulary and grammar required to be successful in AP level IV language.

**AP FRENCH LANGUAGE & CULTURE (Course #H1219)**

GRADE 12

Two Semesters - 1 credit

Recommended: "B" average in Advanced French

\*Weighted course

The AP French Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. Students learn language structures in context and use them to convey meaning. The AP French Language and Culture course strives to promote both fluency and accuracy in language use. In order to best facilitate the study of language and culture, the course is taught in the target language. Upon completion of the course, students may elect to take the AP French Language & Culture exam.

**AP GERMAN LANGUAGE & CULTURE (Course #H1229)**

GRADE 12

Two Semesters - 1 credit

Recommended: "B" average in Advanced German

\*Weighted course

The AP German Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. Students learn language structures in context and use them to convey meaning. The AP German Language and Culture course strives to promote both fluency and accuracy in language use. In order to best facilitate the study of language and culture, the course is taught in the target language. Upon completion of the course, students may elect to take the AP German Language & Culture exam.

## **AP SPANISH LANGUAGE & CULTURE (Course #H1240)**

GRADE 12

Two Semesters - 1 credit

Recommended: "B" average in Advanced Spanish

\*Weighted course

The AP Spanish Language and Culture course takes a holistic approach to language proficiency and recognizes the complex interrelatedness of comprehension and comprehensibility, vocabulary usage, language control, communication strategies, and cultural awareness. Students should learn language structures in context and use them to convey meaning. In standards-based world language classrooms, the instructional focus is on function and not the examination of irregularity and complex grammatical paradigms about the target language. Language structures should be addressed inasmuch as they serve the communicative task and not as an end goal unto themselves. The AP Spanish Language and Culture course strives to promote both fluency and accuracy in language use and not to overemphasize grammatical accuracy at the expense of communication. In order to best facilitate the study of language and culture, the course is taught in the target language. Upon completion of the course, students may elect to take the AP Spanish Language & Culture exam.

# ***Early College Program***

## **Early College Program**

The Wentzville School District Early College Program allows students to begin work toward or to fully complete an Associate's Degree through St. Charles Community College. Courses are specifically sequenced and students must enroll in all courses within a sequence. All fall and spring courses take place on campus within the Wentzville School District and are taught by WSD teachers. Summer classes are taken on campus at the St. Charles Community College.

Requirements for this program include a score of 22 or higher on the ACT and 3.0 or higher GPA.

## **2019-2020 Early College Course Schedule**

\*Please note that this is the anticipated course schedule for the 2019-2020 school year. This is subject to change based on enrollment. In addition, elective courses are subject to change.

<b>Timeline</b>	<b>Course Number</b>	<b>Course Name</b>	<b>Credits</b>	<b>42/Gen Ed Block</b>
Fall	POL 101	American Government	3	Yes
Fall	THE 122	Introduction to Theater	3	Yes
Fall	BUS 101	Introduction to Business	3	No
Fall	CHM 101/103	Intro to Chemistry/Lab (Requires 2 consecutive hours for Lab)	4	Yes
Spring	Art 101	Art Appreciation	3	Yes
Spring	ECO 100	Survey Economics	3	No
Spring	SPE 101	Oral Communications	3	Yes
Spring	Bio 105/106	Essentials of Biology/Lab (Requires 2 consecutive hours for Lab)	4	Yes
Summer	Elective	Based on students intended major	3	No
Summer	Elective	Based on students intended major	3	No

## 2020-2021 Early College Course Schedule

\*Please note that this is the anticipated course schedule for the 2020-2021 school year. This is subject to change based on enrollment. In addition, elective courses are subject to change.

Timeline	Course Number	Course Name	Credits	42/Gen Ed Block
Fall	Eng 101	English Composition 1	3	Yes
Fall	Math 158	College Algebra - Gen Ed	4	Yes
Fal	HIS 101	US History to 1877	3	Yes
Fall	MUS 111	Music Appreciation	3	Yes
Fall	COL 101	College Success Seminar	1	No
Spring	Eng 102	English Composition 2	3	Yes
Spring	HIS 102	US History from 1877	3	Yes
Spring	Math 150	Trigonometry	3	No
Spring	PSY 101	Intro to Psychology	3	Yes
Summer	Elective	Based on students intended major	3	No
Summer	CPT 103	Micro Computer Apps	3	No

# *Lewis & Clark Career Center*

## Course Clusters

<p><b>Advanced Manufacturing</b></p> <ul style="list-style-type: none"> <li>● Precision Machine Technology</li> <li>● Combination Welding</li> </ul>	<p><b>Construction Trades</b></p> <ul style="list-style-type: none"> <li>● Brick and Stone Masonry</li> <li>● Building Trades - Carpentry</li> <li>● Electrical Trades</li> <li>● Heating, Ventilation, &amp; Air (HVAC)</li> </ul>
<p><b>Auto, Engine, and Mechanical Sciences</b></p> <ul style="list-style-type: none"> <li>● Auto Collision Repair</li> <li>● Auto Service Technology</li> <li>● Power Equipment Technology</li> </ul>	<p><b>Education - Preschool &amp; Elementary Careers</b></p> <ul style="list-style-type: none"> <li>● Early Childhood Career (Birth - 3rd grade)</li> </ul>
<p><b>Computer Science Classes</b></p> <ul style="list-style-type: none"> <li>● Computer Maintenance and Networking</li> <li>● Software Development 1</li> <li>● Software Development 2</li> </ul>	<p><b>Health Sciences</b></p> <ul style="list-style-type: none"> <li>● Health Occupations</li> <li>● Health Related Occupations</li> </ul>
<p><b>Hospitality</b></p> <ul style="list-style-type: none"> <li>● Applied Business and Retail Skills</li> </ul>	

### ***ADVANCED MANUFACTURING***

#### **PRECISION MANUFACTURING TECHNOLOGY**

1 or 2 year program; 3 units of credit per year

Prerequisite: C or better in Algebra I

The goal of this program is to supply the industry a highly qualified workforce by graduating exceptional students that are highly motivated and skilled in the needs and requirements expected by the manufacturing done community. The students will learn the history of machining, machine safety, blueprint reading, mechanical design, utilization of conventional machine techniques and Computer Numerical Controlled (CNC) programming.

Year one will consist of: Safety and OSHA, Brief History of Machining, Blueprint Reading, Basic Mechanical Design, Machining Safety, Manufacturing Processes, Semi Precision Measurement, Precision Measurement, Layout, Metallurgy and Heat Treat, Manufacturing Processes, Drill Press, Conventional Engine Lathe, Conventional Vertical Mill, Surface Grinder, Brief History of CNC Machining, Introduction to Computer Numerical Control Systems and Programming.

Instructional delivery will be both in the classroom and the shop. Both project-based and problem-based learning methods will be utilized.

## **COMBINATION WELDING**

2 year program; 3 units of credit per year

Prerequisite: Asthma Free

Combination welding is open to students interested in welding and metalworking as an occupation. Students are instructed in shop safety and the proper procedures for each welding process. Oxy fuel cutting, arc, mig and tig welding, plasma cutting, and air arc cutting processes are taught in all four weld positions and on the five basic weld joints. Metallurgy, blueprint reading, reading a tape measure, metal fabricating techniques and weld symbols are included in the program. The lab is setup to simulate the welding industry. Students are evaluated by written tests and by testing their welds as specified by the American Welding Society code.

Students interested in a career in welding should have good eye/hand coordination, mechanical aptitude, and manual dexterity, freedom from asthma, allergies and physical disabilities which prevent bending, stooping, lifting and working in awkward positions.

## ***AUTOMOTIVE & MECHANICAL TECHNOLOGY***

### **AUTO COLLISION REPAIR**

2 year program; 3 units of credit per year

This course is open to juniors who have an interest in auto collision repair as a wage earning occupation.

One year of the two year program students will learn non-structural repair methods. These include mig welding, straightening and aligning sheet metal, applying and shaping plastic fillers, plastic panel identification and plastic repair methods.

The other year will concentrate on painting and refinishing. Students will learn proper paint preparation procedures, masking techniques and detailing cars. Primer, sealer and basecoat/clearcoat application will be covered along with paint defect identification and repair. Proper spray gun techniques will be taught and practiced with lots of hands on spraying of primers, paints and clears.

Throughout both years, customer satisfaction, measuring and damage analysis along with writing a damage report will be covered. The course is geared to prepare students for entry level auto collision repair and to help prepare for the ASE (Automotive Service Excellence) certification tests. The curriculum is based on the I-CAR (Inter-Industry Conference on Auto Collision Repair) instruction and is used throughout the course. Students will have the opportunity to earn the I-CAR ProLevel 1 in Non-Structural Repair and Refinishing Certification.

### **AUTO SERVICE TECHNOLOGY**

2 year program; 3 units of credit per year

This course is open to individuals who have an interest in auto service trades in terms of a career goal. It is recommended that students have credit in general shop, general metals course and basic computer skills.

Automotive instruction at Lewis & Clark consists of a two-year program that provides the student with the basic theory and skills needed to become an entry level automotive technician and service today's automobiles. Classroom instruction is followed by shop activities related to the lecture. Customer cars are repaired in the

same manner as in the professional shop under the instructor's supervision. Students will gain experience in shop management by writing repair orders, ordering parts, issuing supplies and tools used in the trade. This course is ASE (Automotive Service Excellence) certified by NATEF (National Automotive Technician Education Foundation). Both NATEF and ASE are nationally recognized and provide certification for shops and technicians across the country.

Areas of instruction include:

Engine Repair

Brakes

Steering and Suspension

Heating / Air Conditioning

Electrical / Electronics

Engine Performance

Manual/Automatic Transmission (Basic)

Instructional time is (approximately) 50% class and 50% lab.

### **POWER EQUIPMENT TECHNOLOGY**

1 or 2 year program; 3 units of credit per year

College credit can be purchased through The University of Central Missouri (optional)

This program prepares juniors and/or seniors to diagnose and repair two- and four-cycle engines on such equipment as lawn mowers, chainsaws, rototillers, edgers and trimmers. Power equipment instruction ranges from home-use equipment to commercial equipment.

Students will learn to adjust, clean, lubricate and when necessary replace worn or defective parts such as spark plugs, ignition parts, valves and carburetors. Other skills taught include wheel alignment, deck repair, blade balancing, blade and chain sharpening, battery testing and electrical repair. Troubleshooting and problem solving on all types of equipment are stressed.

Good reading skills are required, as students will need to be able to refer to service manuals for detailed directions.

### ***INFORMATION TECHNOLOGY COURSES***

#### **COMPUTER MAINTENANCE & NETWORKING (College Credit)**

1 year program: 3 units of credit

This program is open to juniors and seniors who have an interest in computers and the Information Technology field. This class learns about computer operating systems, hardware and basic networking. The class prepares you to take the CompTIA A+ exam; an IT technician certification.

Students who successfully complete this program will be able to work as an entry level help desk technician, a computer repair technician, or a computer support technician in all types of business and industry. This class also prepares you for future study in the hardware, operating systems or networking fields. An interest in technology & computers, keyboarding skills and familiarity with Word & PowerPoint are essential. The program has an articulation agreement with St. Charles Community College.



This class may be taken as a 4 hour dual credit class with State Technical College of Missouri. Separate admissions criteria apply. Credit is transferable to many other Missouri colleges and universities including Missouri S&T, SEMO, and Missouri State University. Consult a Lewis & Clark Career Center Counselor for more information.

## **COMPUTER SOFTWARE DEVELOPMENT**

1 or 2 year program: 3 units of credit each year

The Computer Software Development program is a great fit for the analytical student who has a love for computers. Computer programmers use logic and reasoning to identify complex problems and create innovative solutions. Projected occupational demand is high, and the pay is very good.

One year of the program there will be an emphasis on software development. The Linux operating system will be utilized. Students will learn how to write and edit source code using programming languages including Java and Python. Students will design, create, and maintain PC software, mobile apps, and will also have the opportunity to publish their app in the Google Play Store. The other year will concentrate on the Windows operating system. Content will include 2D and 3D graphics, animation, robotics, web pages, database design, and Structured Query Language (SQL).

This program has an articulation agreement with St. Charles Community College for up to 6 credits.

This is an in demand field and skills learned here are applicable to many different workplace environments, including, but not limited to, the following career options: Computer Programmer, Software Developer/Apps, Web Developer, Network/Computer Systems Administrator, Computer Systems Analyst, Software Tester, User Interface Specialist, Software Analyst.

## **CONSTRUCTION TRADES**

### **BRICK & STONE MASONRY**

2 year program; 3 units of credit per year

This program is designed to prepare students for apprenticeship or entry-level jobs in masonry construction. Students will learn to lay brick and block in various bond patterns used in commercial and residential construction. Course will include construction techniques for building fireplaces and chimneys, arches, special wall openings, double width and reinforced masonry, wall anchoring systems, flashings and prevention of water penetration and masonry paving. Students will also gain knowledge of various types of stone construction and tuck-pointing.

Units of study will cover safety practices and procedures; tools and equipment used in masonry construction; properties, sizes and uses of clay and concrete masonry units; experience in laying brick, block and stone in various bond patterns; reinforced masonry walls; masonry veneer construction; layout and construction of fireplaces and chimneys; mathematics for masonry and measuring systems; blueprint reading and construction plans. Students must be able to work at heights on scaffolds, lift and handle heavy materials, work in group situations as a team member, follow instructions and accomplish all tasks in an accurate and safe manner.

## **BUILDING TRADES – CARPENTRY**

2 year program; 3 units of credit per year

This course is open to juniors who show an interest and aptitude in the field of construction as a wage earning occupation. It is recommended that students have one year of industrial arts. Students will have the opportunity for OSHA 10 and ACT WORKKEYS.

Students are familiarized with entry level skills for the major trades involved in residential construction such as carpentry, siding, interior trim, drywall hanging, roofing, concrete work and landscaping.

Most of the program involves the actual building of a house in Lewis & Clark Career Center's own subdivision. Students not only gain experience in home construction, but also will learn about subdivision construction. Houses are sold upon completion. Students will gain experience in building both a single and a two-story dwelling.

## **ELECTRICAL TRADES**

2 year program; 3 units of credit per year

Prerequisite: Algebra with a “C” or higher

Read at or above Grade Level

This course will teach students to identify, install, and troubleshoot electrical wiring and associated devices that are commonly used in both residential and commercial environments. Students will participate in the construction of a new house. The program includes switches, receptacles, lighting, low voltage communications wiring, service installation, and other wiring associated with residential electricity. Students will also learn fundamental commercial wiring including Start – Stop Stations, single and 3 phase motors, and transformers.

Students must be physically fit and capable of working under adverse weather conditions including both very hot and freezing cold. We work during all types of weather on the school house. We work with real circuits, so the ability to abide by strict safety rules is extremely important. An aptitude for math in general and algebra in particular is required, as is an aptitude to read and produce technical documents and drawings.

## **HEATING, VENTILATION AND AIR CONDITIONING (HVAC)**

2 year program; 3 units of credit per year

Prerequisite: Algebra 1 with a “C” or higher

This course will provide students with training in heating, ventilation, air conditioning, and refrigeration to qualify them for employment as an apprentice or helper assistant to an A/C mechanic in service and/or installation of equipment. We will cover tool selection and use, tubing, piping, brazing, soldering and basics of vapor compression refrigeration, air conditioning & heating systems. Electric circuits and components, troubleshooting, basic sheet metal, customer relations, and preparation for the EPA exam will also be covered. Applicants should have a good mechanical aptitude and be able to understand both written and verbal instructions. Students should be in good physical condition and free from respiratory problems.

## ***EDUCATION***

### **EARLY CHILDHOOD CAREERS**

1 or 2 Year Program (Completion of 2 years for CDA eligibility)

3 units of credit per year

Prerequisite; Prior Child Development course recommended

This course will prepare students for entry level employment in the field of early childhood education, while providing the foundations for study in higher education programs that lead to certification in early childhood or elementary education. Students will gain the leadership, employment, and communication skills necessary for success in Early Childhood Careers. Over the course of the program students will explore career opportunities and identify personal traits needed for success in careers working with young children. They will be given opportunities to work directly with children ranging in age from birth to age 8 in various childcare and elementary school settings. Students will earn certification in infant, child, and adult First Aid/CPR. In addition, students will earn a Missouri state certificate for the Infant Safe Sleep Course. Students completing this program will be able to describe typical child development, demonstrate knowledge of creating safe and healthy learning environments, and be competent in lesson planning and implementation. Students will practice appropriate behavior management techniques, and will learn about nutritional guidelines, state licensing expectations, and the legal and ethical responsibilities of child care workers and/or classroom teachers. Students who have met all requirements and attended two years of the program will be eligible to test for the CDA (Child Development Associate) credential upon graduation.

## ***HEALTH SCIENCES***

### **HEALTH OCCUPATIONS & HEALTH RELATED OCCUPATIONS ( College Credit)**

1 year program; 3 units of credit

The Health/Health Related Occupations courses offer learning experiences for juniors and seniors in high school designed to create or further stimulate their interest in the many career opportunities available in the health field. This course is designed to be challenging and meet the needs of all learning styles. The student will learn beginning skills and the basic procedures needed for an entry-level job and a sound basis for continuing their education in the medical field.

The first semester involves classroom theory, demonstrations and practice. During the second semester, students begin to draw upon previously acquired knowledge and basic skills by applying them to various health services through supervised clinical observations and experiences. Students must have an up to date immunization record, a TB test, a urine drug screen, a criminal background check, a flu vaccine, and maintain a 75% average and 90% attendance to remain in the program and be placed in clinical rotations. Students are placed in clinical rotations Monday through Thursday and continue classroom work on Fridays.

This class may be taken as a 4 hour dual credit class with State Technical College of Missouri. Separate admissions criteria apply. Credit is transferable to many other Missouri colleges and universities including Lindenwood, Barnes-Jewish College of Nursing, and University of Central Missouri. Consult Lewis & Clark Career Center Counselor for more information.

## ***HOSPITALITY***

### **APPLIED RETAIL AND BUSINESS SKILLS**

1 and/or 2 year program; 3 units of credit per year

This course is designed for juniors or seniors with special needs who have an interest in the retail industry. A prerequisite for the course is potential ability to work in competitive employment.

The program provides an active, hands-on, multimedia approach that emphasizes instructional strategies that are successful with special needs populations. The students take “ownership” of and operate a fully functional store on the Lewis & Clark campus.

The students in the Applied Retail & Business Skills program rotate through the following stations at JC’s, the school store: cashier, inventory control, maintenance, bookkeeper, food preparation, and food manager. The classroom instruction includes lessons to inform and enhance training and skills learned through operations. Also included are lessons on self-awareness, social skills, communication skills, and employability skills.

Skills learned at the Lewis & Clark campus are reinforced through community-based training. Students that qualify for the independent internship will be eligible for placement within the community with minimal supervision. The remaining students will complete their internships at JC’s (Lewis & Clark store) with continued supervision; with the emphasis on job readiness and work hardening skills, along with a heavier workload and increased responsibilities.