

P  
B  
L  
U  
F  
F  
T  
E  
C  
H  
N  
I  
C  
A  
L  
C  
A  
R  
E  
E  
R  
C  
E  
N  
T  
E  
R

Poplar Bluff  
Technical Career Cen-  
ter

Embedded  
Courses  
Catalog  
2018-2019



Utilizing  
A+nywhere Learning System  
A+LS

# Table of Contents

|  |    |
|--|----|
| PBTCC Embedded Course Program Overview | 2  |
| Course Descriptions                    |    |
| <b>Electives</b>                       |    |
| Art Appreciation                       | 4  |
| Career Essentials                      | 4  |
| Health                                 | 4  |
| Personal Finance                       | 4  |
| <b>English</b>                         |    |
| English Skills IX                      | 5  |
| English Skills X                       | 5  |
| English Skills XI                      | 5  |
| English Skills XII                     | 5  |
| <b>Foreign Language</b>                |    |
| Spanish I A                            | 6  |
| Spanish I B                            | 6  |
| <b>Mathematics</b>                     |    |
| Algebra I, Part 1                      | 6  |
| Algebra I, Part 2                      | 7  |
| Algebra II, Part 1                     | 7  |
| Algebra II, Part 2                     | 7  |
| Geometry                               | 8  |
| <b>Science</b>                         |    |
| Chemistry I                            | 8  |
| Chemistry II                           | 8  |
| Comprehensive Biology                  | 8  |
| Earth & Space Science                  | 9  |
| Physical Science                       | 9  |
| <b>Social Studies</b>                  |    |
| Civics                                 | 9  |
| Economics                              | 10 |
| Government                             | 10 |
| History of America I                   | 10 |
| History of America II                  | 10 |
| History of the World I                 | 11 |
| History of the World II                | 11 |
| U.S. Geography                         | 11 |
| U.S. History I                         | 11 |
| U.S. History II                        | 12 |
| World Geography                        | 12 |

# PBTCC Embedded Course Program

The Anywhere Learning System (A+LS) software program is an e-learning solution ideal for providing an efficient way to overcome instructional obstacles faced by students desiring to pursue career educational opportunities at the Poplar Bluff Technical Career Center.

The research-based curriculum content is available to your students in the four core subject areas and several elective areas. Lessons are extensive, relevant, and rigorous. The program consists of management and reporting tools that enable educators control over the learning process. Student assessment tools are integral to the management system and educators can test students on national and state learning objectives, which are included in the software. This software has been aligned to Missouri Standards and Grade Level Expectations.

Learning is cumulative with A+LS. All curriculum builds on skills learned during the previous course. The delivery of the curriculum uses the direct instruction method that consists of studying the material, working practice exercises, taking a mastery test, and finally showing assimilation of the information and skills through an activity or essay. The Report Wizard component of the program will create a report detailing skills mastered. Educators and administrators from the sending schools can utilize these reports to determine if the student has successfully mastered the objectives of the course so that credit can be awarded.

The Poplar Bluff Technical Career Center working in partnership with our consortium schools can help provide an instructional avenue for students who may not be able to enroll in a PBTCC program due to inability to meet graduation requirements. A student wishing to take advantage of this program would need to be enrolled in a PBTCC program. Upon identifying a student wanting to complete an A+LS Embedded Course the sending school counselor should contact the Vocational Resource Educator at PBTCC **within the first two weeks of a semester**. The VRE will prepare an agreement that will request a teacher of record for the sending school. A teacher of the core subject area of the course requested by the student should be the teacher of record. This teacher would be the educator that could review the course objectives to insure they meet your school's requirements for the chosen course. This teacher would also be the teacher of record when transcribing credit. The vocational resource educator and Basic Skills Instructor will then make arrangements for the student to begin their chosen course of study. The student will complete some of the course work at PBTCC with a teacher to provide instruction and guidance. It would be beneficial for the student to have time and access to an internet accessible computer at their home school so that some work could be completed there when time permits. Students can work independently and complete the instructional and practice exercises at any location they have access to a computer and the internet. **Mastery tests would be completed at PBTCC**. Course completion time would depend on how much time the student worked and how quickly material was learned and mastery demonstrated. Upon course completion the student's home school will be notified and reports of objectives mastered with the student's rate of mastery for those objectives will be forwarded. **The school can use these reports to determine a course grade and as documentation of course completion. The school at that point will decide how they will want to grant and transcribe the credit.**

# Course Descriptions

## Electives

### Art Appreciation

(Grade Levels 9-12; Equivalent to One Semester Elective; 25 lessons)

Art Appreciation is a survey of the visual arts of painting, sculpture, architecture, and the principles of design. The course will enable students to develop an understanding of how an artist has the power to inspire and inform the viewer by making a personal, social, political, or religious statement. Students will also explore the history and art of both past and present world cultures.

### Career Essentials

(Grade Levels 9-12; Equivalent to One Semester Elective; 32 lessons)

The choice of a career is an integral aspect of the personal and social development of an individual, and being prepared for a job search increases the chances of success. The *A+LS*<sup>TM</sup> Career Essentials course prepares students to deal with the various aspects of the job search, such as resume writing, job interviewing, thank you letters, and prospective job offers.

### Health

(Grade Level 9-12; Equivalent to One Semester Elective; 39 lessons)

In this course, students will learn about healthy lifestyle choices that center on the basic concepts of physical health and wellness as described in the National Standards for Health Education. There is an emphasis on nutrition and exercise to introduce students to healthy lifestyle choices that center on the basic concepts of physical health and wellness. Students also learn about health risks, types of illnesses, functions of the major systems of the body, disease prevention, ways to enhance their health through the use of decision-making and communication skills and health career options. Reading selections are used to expand the student's knowledge of health-related issues. Some topics include cholesterol, drug abuse, addiction, eating disorders, and teen driving.

### Personal Finance

(Grade levels 9-12; Equivalent to One Semester Elective; 28 lessons)

The lessons in the Personal Finance course are divided into seven units of study. These units are designed to guide the student through the process of personal financial planning. The lessons identify the skills that are necessary for budgeting, purchasing, and financial success.

Unit 1 - Economics

Unit 2 - Time and Financial Planning

Unit 3 - Ways to Save and Spend

Unit 4 - Housing Expenses

Unit 5 - Transportation

Unit 6 - Shopping and Purchasing

Unit 7 - Business Expertise

# Course Descriptions

## English

### English Skills IX

(Grade Level: 9; Equivalent to Two Semesters English Credit; 40 Lessons; 1073 Instructional Pages)

Reading section contains lessons about common expressions, connotation and denotation, Greek and Latin words, poetry, word recognition, and story details, and sequence; Usage section contains lessons about punctuation, clauses and phrases, and usage problems; Vocabulary section reviews vowel sounds and spelling.

### English Skills X

(Grade Level 10; Equivalent to Two Semesters English Credit; 38 Lessons; 969 Instructional Pages)

Reading section contains lessons about fact and opinion, folklore, inferences, story elements, and words in context; Usage section contains lessons about parts of speech, parts of sentences, and verbals; Vocabulary section reviews blends and silent letters.

### English Skills XI

(Grade Level 11; Equivalent to Two Semesters English Credit; 36 Lessons; 950 Instructional Pages)

Reading section contains lessons about American literature, context clues, farce and satire, and foreign terms; Usage section contains lessons about infinitives, clauses, verb tenses, and usage problems; Vocabulary section reviews consonants, syllables and pronunciation, and digraphs.

### English Skills XII

(Grade Level 12; Equivalent to Two Semesters English Credit; 34 Lessons; 916 Instructional Pages)

Reading section includes British literature, drama, etymology, genres and literature, literary devices, and propaganda and bias; Usage section reviews clauses and diagramming; Vocabulary section reviews root words and sounds of various letters.

# Course Descriptions

## Foreign Language

### Spanish I A

(grade levels 9-12; 17 Lessons: Equivalent to a one Semester Course)

Spanish I A is a comprehensive, course for grades 9-12 designed to help students comprehend and communicate the Spanish language as well as gain a better awareness of Spanish-speaking cultures by focusing on vocabulary, grammar, pronunciation, reading, and writing of the Spanish language. The course is divided into weekly units of four lessons designed to examine a variety of topics and teach basic conversational skills applicable in the classroom and daily use. Lessons 1-3 of all units consist of a daily lesson and a practice and mastery test for student learning. Lesson 4 of each unit contains a review of material learned in that unit, an interactive game, and the unit test. Spanish I A includes topics such as common greetings and cognates, school and classes, time, days, months, seasons, and weather, appearance, personality, and feelings, daily activities and sports, asking questions and giving positive and negative responses, food and drinks, going to the supermarket, and going to a restaurant. The content and concepts in this course are, in part, based on the National Standards in Foreign Language Education developed in cooperation with the American Council on the Teaching of Foreign Languages (ACTFL).

### Spanish I B

(grade levels 9-12; 18 Lessons; Equivalents to one Semester Course; Part II of Spanish I A)

Spanish I B is design to help students comprehend and communicate the Spanish language as well as have a better understanding of Spanish cultures. Lessons cover a variety of topics and build on the conversation and grammatical skills introduced in Spanish I A, allowing students to become more proficient in their knowledge of the Spanish language. Spanish I B builds on the conversational skills introduced in Spanish I A. This course is divided into weekly units with four lessons in each unit. Lessons 1-2 of all units consist of daily lesson and a practice and mastery unit. Lesson 4 of each unit contains a review of material learned in the unit, an interactive game, and the unit test. Spanish I B includes topics such as use of reflexive verbs and pronouns, families and kinship, household objects and chores, medical words and phrases, cardinal directions, travel terms and locations, personality descriptors, games and activities, and technology.

## Mathematics

### Algebra I, Part I

(Grade Levels -10; 48 Lessons; 2557 Instructional Pages, 60-96 Study Hours)

Topic areas include algebraic expressions and equations, writing numbers in exponential form, using standard and scientific calculators, integers, absolute values, review of additive identity, like terms, using reciprocals to solve problems, evaluating expressions using order of operations, inverse operations, eliminating fractions, identification of the x and y axes, linear equations, graphing with constants, rules of exponents, binomials, trinomials, using the FOIL meth-

# Course Descriptions

od, factoring our monomials trinomial squares, and quadratic equations.

## Algebra I, Part II

(Grade Levels 8-10; 52 Lessons; 2363 Instructional Pages; 65-104 Study Hours)

Continuing coursework from the Algebra I, Part I title that covers finding solutions of linear systems of equations by graphing, eliminating variables, motion problems, using negative one as a factor, identifying the least common multiple of expressions, ratio and proportion, using inequalities to solve problems, finding the value of a function, using vertex and axis of symmetry or the T-table, problem solving involving joint and combined variation, and identifying and evaluating the discriminant of a quadratic equation.

## Algebra II, Part I

(Grade Levels 10-12; 45 Lessons; 2418 Instructional Pages; 56-90 Study Hours)

Topic areas include review of the real number system including rational numbers, rules for combining and multiplying real numbers, order of operations, connecting words and numbers through expressions, developing a plan to solve a problem, combining like terms, definition and examples of ordered pairs, grids, quadrants, abscissa, defining linear equations, graphing equation systems, three-variable equations, matrix multiplication, transformation, point and matrix transformations, polynomial types, zero as an exponent, finding higher variables, factoring numerators, and solving complex rationals.

## Algebra II, Part II

(Grade Levels 10-12; 34 Lessons, 1988 Instructional Pages; 43-68 Study Hours)

Continuing coursework from the Algebra II, Part I title that covers review of square roots, radicals, complex pure and imaginary numbers, solving and factoring, identifying and evaluation the discriminant of a quadratic equation, rewriting equations, solving problems with number lines, graphing parabola, circle parts and formulas, hyperbola, graphing quadratic relations and inequalities, inverse functions, compound interest problems, sequences of numbers, identification of sigma, examples and definition of common ratios, finite series, and solving factorial problems.

# Course Descriptions

## Geometry

(Grade Levels 9-11; 34 Lessons; 1991 Instructional Pages; 43-68 Study Hours)

Introduces basic geometric terms commonly used and also covers geometric concepts including angles, perpendicular and parallel lines, rays and transversals, measuring line segments, lines, segments, sides and vertices of angles, acute obtuse, and right angles, parallel and skew lines, acute, obtuse, and right triangles, calculating perimeter, volume and area of trapezoids, polygons, proportional ratios, pyramids, cones, spheres, chords, circumference, tangents, and angle measurement.

## **Science**

### Chemistry I

(Grade Levels 10-11; 31 Lessons; 1286 Instructional Pages; 39-62 Study Hours)

The introductory chemistry course covers personal safety, basic lab techniques, heating solids, determining specific heat, mixtures, chemical reactions, calculating average atomic mass numbers, the periodic table, positive and negative charges, chemical equations, balancing the single replacement equation, empirical formulas, equation stoichiometry, using instruments to measure and describe gas, Boyle's Law, pressure in the atmosphere, temperature, and universal symbols.

### Chemistry II

(Grade Levels 11-12; 30 Lessons; 1228 Instructional Pages; 38-60 Study Hours)

Continuing coursework from the Chemistry I title that includes a review of the empirical and molecular formulas, the first law of thermodynamics, electromagnetic energy, classifying subatomic particles and forces, molecular geometry, identification of symbols used in writing chemical reactions, properties of solids, colligative properties, rate of diffusion, osmotic pressure, activation energy, the pH scale, spontaneous reactions, Le Chatelier's Principle, buffers, heat of reaction, and entropy.

### Comprehensive Biology

(Grade Levels 9-12; Equivalent to a One Semester Course; 39 lessons)

Comprehensive Biology is designed to fully address state and national standards for high school in one complete course. General topics in science as they apply to biology include science as inquiry, the history and nature of science, and science and technology. The specific topics for this biology course include the structure and function of organisms; matter, energy, and organization in living systems; the molecular basis of heredity; life cycle and reproduction; diversity, adaptations and origins; the interdependence of organisms; the behavior of organisms; and organisms in the environment.

# Course Descriptions

## Earth & Space Science

(Grade Levels 9-11; 39 Lessons; 2467 Instructional Pages; 49-78 Study Hours)

Topic areas include an introduction to earth and space themes, comparison and uses of pie charts, review of the elements and their properties, observations of events and phenomena in the universe, sunspots, the solar system, satellites, earthquakes, the cycles of the moon, balloons, airplanes, development of rockets, the Apollo missions, characteristics of different atmospheric layers, cloud cover, weather terms and cycles, high and low pressure, types of fronts, climatology, oceanography, underground water, topography, weathering and erosion, dinosaurs, and natural resources.

## Physical Science

(Grade Levels 9-10; Equivalent to a One Semester Elective; 31 lessons)

Physical Science is a comprehensive course that invites students to explore the universe of nonliving matter. This course offers several distinctive components: an in-depth examination of the biological functions of vision and sound in relation to physical laws; the impact of scientific

Discoveries on technology and society; and an overview of natural hazards, including the impact of humans on the environment. The Physical Science course covers the fundamentals of chemistry, matter, energy, and various scientific fields. The lessons are designed to move the student beyond the level of basic knowledge into critical thinking and learning activities.

## **Social Studies**

### Civics

(37 Lessons; 2420 Instructional Pages; 46-74 Study Hours)

Covers the areas of the definition and purpose of government, the English Magna Carta, House of Lords and Commons, Thomas Jefferson and the founding fathers' objectives, the drafting of the Declaration of Independence, the English Bill of Rights, the Preamble, religion, the amendments to the Constitution, direct democracy, checks and balances, copyrights, patents, establishing the Presidential system, the definition of civil rights, women's suffrage, Dr. Martin Luther King, Jr., affirmative action, and much more.

# Course Descriptions

## Economics

(31 Lessons; 2009 Instructional Pages; 39-62 Study Hours)

High school level course that covers the definition of economics, microeconomics, producers and consumers, capitalism, socialism, communism, the world's economy from 1500 to present day, colonization, balance of trade, the Great Depression, the U.S. economy from 1600 to present day, economic causes of the Revolutionary War, railroads, corporations, monopolies, labor unions, the New Deal, recession, inflation, classical theorists, the American microeconomic system, applied economics, social programs, challenges of the global economy, welfare reform debate, and the budget deficit.

## Government

(26 Lessons; 3065 Instructional Pages; 58-92 Study Hours)

This high school level course contains the topic areas of government functions, population, territory, sovereignty, the origin of government, the English Bill of Rights, the founding of the original thirteen colonies, the Proclamation of 1763, the First continental Congress, the Articles of Confederation, the origin and principles of the Constitution, the Bill of Rights, executive, legislative, and judicial powers, the Magna Carta, taxes, the U.S. Senate, impeachment, how a bill becomes a law, the U.S. House of Representatives, elections, the President, the Presidential Cabinet, executive agencies, fiscal and monetary policy, and elections.

## History of America I

(49 Lessons; 3085 Instructional Pages; 61-98 Study Hours)

Introduces students to the definition of history, the Middle Ages, Christopher Columbus, Incas, French exploration, King Henry, Queen Elizabeth I, the New England Colonies, the Mayflower, pilgrims, Henry Hudson, Tobacco, plantations, slaves, Thanksgiving, British and French colonists, Proclamation of 1763, the Boston Massacre, the American Revolution; the Louisiana Purchase, moving westward, Texas Independence, the Mexican War, and the Civil War from 1861-1865.

## History of America II

(49 Lessons; 3148 Instructional Pages, 61-98 Study Hours)

Covers the costs of the Civil War, the 13<sup>th</sup> Amendment, tenant farmers, sharecroppers, life on the Plains, the American Indian, 1862 Homestead Act, railroad industry, Henry Ford and the assembly line, the Roaring Twenties, the 18<sup>th</sup> Amendment, prohibition, the Great Depression, the Dust Bowl, the Paris Peace Conference, World Wars I and II, Pearl Harbor, D-Day, the Holocaust, the Cold War, Harry Truman, Dwight Eisenhower, John F. Kennedy and his assassination, the Vietnam War, Nixon, Ford, Carter, Reagan, Bush, Clinton, George W. Bush, and terrorism.

# Course Descriptions

## History of the World I

(47 Lessons; 2701 Instructional Pages; 59-94 Study Hours)

Includes an overview of history, artifacts, Ice ages, Ancient Egypt, the Hanging Gardens of Babylon, the Ten Commandments, Greek civilization, Alexander the Great, Philosophers, the Roman Empire, Julius Caesar's rise and fall, Roman gods, the development of commerce, the Irish and Anglo-Saxons, Vikings, the Crusades, feudalism Henry I, Edward III. Joan of Arc, Isabella and Ferdinand, Africa, the Americas, North American civilizations, the Renaissance, the Reformation, the American Revolution, the Boston Tea Party, the First Continental Congress, the Constitution, and post-Napoleonic France.

## History of the World II

(49 Lessons; 3148 Instructional Pages; 61-98 Study Hours)

Covers China, Japan, isolationism, Asia, Charles Townshend, the transcontinental railroad, socialism, science in the 1800's, pioneers in medicine, Romanticism, Impressionism, the Romanov Dynasty, Moscow, Catherine the Great, Latin America, Spanish colonization, Queen Victoria, the U.S. in the 1800's, German Unification, the Age of Imperialism, European influence in Africa, Indian resistance to British rule, the rise of nationalism, Allied forces, World War II. League of Nations, decline of trade, Increase of women's rights, the Russian Revolution, Vladimir Lenin, tensions between the Soviet Union and the United States, the Berlin Wall, Vietnam, fighting in Cambodia, western Europe, NATO, the United Nations, and eastern Europe.

## U.S. Geography

(35 Lessons; 1307 Instructional Pages; 44-70 Study Hours)

Introduces students to the study of geography and also covers the globe, map symbols, islands, landforms such as glaciers, hills, bodies of water, changing seasons, the Northeast and Middle Atlantic states, the Southeastern states, the Great Lakes region, the Plains regions, the Southwestern states, the Mountain states, the Pacific states, the size, climate, characteristics, and settlers of all the regions, the Continental Divide, U.S. governed islands and territories, national landmarks such as the Appomattox Court House, Ellis Island, the Alamo, Niagara Falls, the Grand Canyon, and Yellowstone National Park.

## U.S. History I

(34 Lessons; Equivalent to one Semester Course)

The story of America is written in the rich history of the accomplishments of its people. America represents a multitude of cultures that together form a unified nation that has prospered for over two hundred years. This course is designed to bring the history of America to life by connecting the events of the past to today's world. Students will examine history by using the themes of culture, economics, geography, global connections, government, science/technology, and sociology/anthropology.

# Course Descriptions

## U.S. History II

(35 Lessons; Equivalent to one Semester Course; second part of U.S. History I)

America represents a multitude of cultures that together form a unified nation that has prospered for over two hundred years. This course is designed to bring the history of America to life by connecting the events of the past to today's world. Students will examine history by using the themes of culture, economics, geography, global connections, government, science and technology, and sociology and anthropology. U.S. History II is a second semester course that continues to show how events of the past are connected to today's world. Beginning with post World War I, this course examines significant events such as the Great Depression, World War II, the Civil Rights Movement, and the 2008 presidential election. Students will be guided through twentieth and twenty-first century events that have shaped our nation's society.

## World Geography

(36 Lessons; 1222 Instructional Pages, 45-72 Study Hours)

Second Course of the A+LS geography series continues teaching students about the study of geography and the tools of geography. Other topic areas include continents, islands, mountains, valleys, bodies of water, lakes, oceans, Asia, southeast Asia, Central and Northern Asia, the Middle East, Iran, Kuwait, Saudi Arabia, Oman, North Africa, West Africa, East Africa, the Sahel, eastern, southeaster, central, southern, western, and northern European countries, the United Kingdom, Wales, Scotland, Ireland, North America, Canada, the U.S., Mexico, Belize, the West Indies, South America, and Oceania.

For more information about the A+nywhere Learning System visit [www.amered.com](http://www.amered.com). In addition to other information, you can learn more about the course curriculum and how the courses align to Missouri standards.

## **Embedded Classes at PBTCC**

- Offered to students from our eight consortium high schools who are enrolled in a PBTCC program
- During first two weeks of a semester a counselor can submit an “A+LS Embedded Course Agreement” to enroll a student in a class
- Home school counselor/principal should insure an instructor certified to teach the students chosen subject is the “Coordinating Instructor” of record on the agreement
- Counselor will receive periodic updates as to the student’s progress. Upon completion of course, counselor will receive documentation of student’s performance on practice lessons and final test scores.
- Sending school counselor/principal determines how the final course grade will be transcribed on the student’s transcript based on their school policies for these types of courses.