## EXHIBIT K: PATRICK F. TAYLOR SCIENCE & TECHNOLOGY ACADEMY REPORT CARD AND COURSE CATALOG

RFP NUMBER: 171116

### PATRICK F. TAYLOR SCI. & TECH. ACADEMY

2015-2016 • Jefferson Parish • Grades 6-12 • 026105

#### Magnet School

545 Enrolled • <5% Special Education • 43% Economically Disadvantaged



SCHOOL	14/15 vs 15/16	MINORITY STUDENTS	STUDENTS WITH DISABILITIES	ECONOMICALLY DISADVANTAGED STUDENTS	DISTRICT	STATE	NATIONAL
92%	IMPROVED	<b>91</b> %	N/A	<b>91</b> %	31%	33%	N/A
> <b>9</b> 5%	IMPROVED	> <b>9</b> 5%	N/A	<b>&gt;9</b> 5%	60%	61%	N/A
27.8	DECLINING	27.5	N/A	27.6	19.0	19.3	19.7
> <b>95</b> %	N/A	<b>&gt;95</b> %	N/A	<b>&gt;95</b> %	73%	75%	N/A
>95%	STEADY	> <b>9</b> 5%	N/A	>95%	73%	78%	83%
55%	DECLINING	53%	N/A	53%	<5%	8%	22%
<5%	DECLINING	<5%	N/A	<5%	10%	18%	N/A
93%	IMPROVED	88%	N/A	92%	54%	58%	68%
	92% >95% 27.8 >95% >95%	92% Improved   >95% Improved   27.8 Improved   >95% Improved   >95% Improved   >95% Improved   \$27.8 Improved   \$95% Improved   \$27.8 Improved   \$27.8 Improved   \$27.8 Improved   \$2000 Improved   Improved Improved   Improved Improved   Improved Improved<	SCHOOL 14/15 vs 15/16 STUDENTS   92% Image: Students 91%   >95% Image: Students >95%   27.8 Image: Students 27.5   >95% Image: Students 27.5   >95% N/A >95%   >95% Image: Students 27.5   >95% N/A >95%   55% Image: Students 295%   55% Image: Students 53%   <5%	SCHOOL 14/15 vs 15/16 MINDENTS WITH DISABILITIES   92% Improved 91% N/A   >95% Improved >95% N/A   27.8 Improved 27.5 N/A   27.8 Improved 27.5 N/A   >95% N/A >95% N/A   >95% N/A >95% N/A   \$95% Improved 27.5 N/A   \$95% N/A >95% N/A   \$95% Improved \$95% N/A   \$95% Improved \$95% Improved   \$95% Imp	SCHOOL   14/15 vs 15/16   MINORITIS   OWITH DISABILITIES   DISADUANTAGED STUDENTS     92%   Improved   91%   N/A   91%     >95%   Improved   >95%   N/A   >95%     27.8   Improved   27.5   N/A   >95%     27.8   Improved   27.5   N/A   27.6     >95%   N/A   >95%   N/A   27.6     >95%   N/A   >95%   N/A   27.6     >95%   N/A   >95%   N/A   >95%     \$95%   N/A   >95%   N/A   >95%     \$95%   Stready   >95%   N/A   \$95%     \$95%   Image: Stready   \$95%   N/A   \$95%     \$55%   Image: Stready   \$3%   N/A   \$53%     \$93%   Image: Stready   \$88%   N/A   \$92%	SCHOOL   14/15 vs 15/16   MINDRINT   DWITH DISABILITIES   DISADVANTAGED   DISTRICT     92%   Improved   91%   N/A   91%   31%     >95%   Improved   >95%   N/A   >95%   60%     27.8   Improved   27.5   N/A   27.6   19.0     >95%   N/A   27.6   19.0   19.0     >95%   N/A   27.6   19.0   19.0     >95%   N/A   >95%   N/A   27.6   19.0     >95%   N/A   >95%   73%   73%     55%   Image: Stready   53%   N/A   53%   25%     55%   Image: Stready   <55%	SCHOOL   14/15 vs 15/16   INDENTIS   INTERT DISADVANTAGED   DISTRICT   STATE     92%   Improved   91%   N/A   91%   31%   33%     >95%   Improved   >95%   N/A   >95%   60%   61%     27.8   Improved   27.5   N/A   27.6   19.0   19.3     >95%   N/A   27.6   19.0   19.3   19.3     >95%   N/A   27.5   N/A   27.6   19.0   19.3     >95%   N/A   >95%   N/A   27.6   19.0   19.3     >95%   N/A   >95%   N/A   27.6   19.0   19.3     >95%   N/A   >95%   N/A   27.6   19.0   19.3     >95%   Steady   >95%   N/A   >95%   73%   75%     Steady   S3%   N/A   53%   53%   8%   10%   18%     S5%   Steady   S8%   N/A   92%   54%

### DID THIS SCHOOL MAKE PROGRESS WITH STUDENTS WHO STRUGGLED ACADEMICALLY?

Schools earn a maximum of 10 progress points for students previously non-proficient but who exceeded expectations in the current year.

тоти	AL POINTS EARNED		N/A		
2013-2014	2014-2015	2015-2016	FAMILY -	DATA CENTER	
<b>A</b> SPS 138.0	A SPS 135.5	<b>A</b> SPS 137.2	Support TOOLBOX		

During transition years (2013-2017), expectations for all students have been raised by increasing the quality of ELA and math assessments and phasing out of the LAA 2 assessments. During this transitional learning year, a curve policy is in place to ensure that the distribution of letter grades remains stable. See more information about transition policies.



# **Course Catalog.**

The mission of Patrick F. Taylor Science & Technology Academy is to prepare students for success in college and in a global marketplace, through challenging academic coursework in the sciences, technology, engineering and mathematics (STEM), project- based learning, total immersion in technology, and career planning, while supporting their personal, and social development. The faculty, staff and administration have strong beliefs regarding Taylor's charge as an educational institution.

In addition to traditional courses, Taylor also offers a wide range of AP courses, such as: AP Literature, AP Language, AP Calculus AB, AP Statistics, AP Biology, AP Chemistry, AP United States History, AP Human Geography, AP Music Theory, and AP Computer Science. Dual enrollment with the University of New Orleans (UNO) is also an option for juniors and seniors.

# **English Language Arts**

### **Reading 6 Honors**

The sixth grade reading curriculum combines the grade level expectations of the seventh grade comprehensive curriculum prescribed by the state and implemented by Jefferson Parish. In order to attain honors credit, this course has a specific summer reading requirement of two books and a classic film from a list of choices, outside reading of three hundred pages each quarter, and teacher course demands. Using a project-based instructional mode, students read a variety of literary genres from Elements of Literature, various supplemental materials, and online resources to further develop

analytic and interpretive skills in literature. Interdisciplinary connections are made through projects that integrate areas of social, cultural, and historical interests.

#### **English 6 Honors**

The sixth grade English course focuses on the seventh grade comprehensive curriculum prescribed by the state and implemented by Jefferson Parish. In order to attain honors credit, students must present exemplary writing samples in two competitive contests. Through the writing process, students learn to develop skills in expository and narrative composition. Introducing and building the multi-paragraph essay form is one component of the program. Grammar, usage, and mechanics are taught through practice and application. Vocabulary development is done in context and through the Vocabulary Workshop series offering challenging exercises in verbal flexibility. Using a projectbased approach, students further develop research-based production skills around a real interest, topic, problem, purpose, community need, and/or a real audience.

#### **Reading 7 Honors**

The seventh grade reading curriculum combines the grade level expectations of the eighth grade comprehensive curriculum prescribed by the state and implemented by Jefferson Parish. In order to attain honors credit, this course has a specific summer reading requirement of three books from a list of choices, outside reading of three hundred pages each quarter, and teacher course demands. Using a project-based instructional mode, students read a variety of literary genres from Elements of Literature, various supplemental materials, and online resources to further develop analytical and interpretive skills in literature. Interdisciplinary connections are made through projects that integrate areas of social, cultural, and political thought.

#### **English 7 Honors**

The seventh grade English course focuses on the eighth grade comprehensive curriculum prescribed by the state and implemented by Jefferson Parish. In order to attain honors credit, students must present exemplary writing samples in three competitive contests. Through the writing process, students learn to develop skills in expository and persuasive composition. Mastering the multiparagraph essay form is one component of the program. Grammar, usage, and mechanics are taught through practice and application. Vocabulary development is done in context and through the Vocabulary Workshop series offering challenging experiences with new words. Using a projectbased approach, students further develop research-based production skills around a real interest, topic, problem, purpose, community need, and/or a real audience.

#### **English I Honors**

Credit: 1 Carnegie Unit

Prerequisite: Completion of 7th grade

Within a Common Core-aligned curriculum, English I honors is a comprehensive, project-based course, focusing on a study of literature, composition, and language, including vocabulary study, speaking, and listening. The literature component of the course encompasses reading, comprehending, and responding to various genres, short stories, poetry, novels, non-fiction, and drama. The writing component of the course emphasizes the writing process/craft to develop various modes (description, narration, exposition, and persuasion) of multi-paragraph essays for different purposes and audiences. Students must locate, select, and synthesize information from a variety of sources in order to present knowledge in a variety of formats, including the documented essay. The language component of the course integrates grammar, usage, mechanics, and spelling in context of composition and literature. Also, the English I honors course requires summer reading, a minimum of 400 pages per nine weeks (a block semester) of outside reading, and entry into a minimum of two contests or competitions.

#### **English II Honors**

Credit: 1 Carnegie Unit Prerequisite: English I Honors Within a Common Core-aligned curriculum, English II is a comprehensive project-based course, offering a study of literature, composition, and language, including speaking and listening. The literature component encompasses reading, comprehending, and responding to various short stories, poetry, novels, non-fiction & drama. The composition content of the course emphasizes the writing process/craft to develop various modes of writing for different purposes and audiences. Students must locate, select, and synthesize information from a variety of sources. The language component of the course integrates grammar, usage, mechanics and spelling into reading and writing. Also, the English II honors course requires summer reading, a minimum of 400 pages per nine weeks (a block semester) of outside reading, and entry into a minimum of two contests or competitions.

#### **English III Honors**

Credit: 1 Carnegie Unit

Prerequisites: English I Honors and English II Honors

In a Common Core-aligned curriculum, this chronological course focuses on a project-based study of American literature. English III focuses on interpreting works form literature through close reading, thinking critically, and written analysis. Additionally, students apply oral communication skills and read extensively in American literature spanning from America's inception through contemporary literature. Writing assignments vary in form and purpose, requiring students to write at least two literary analysis essays per quarter and one research paper. Also, the English III honors course requires summer reading, a minimum of 400 pages per nine weeks (a block semester) of outside reading, and entry into a minimum of two contests or competitions. The course covers a rigorous pace and requires daily homework.

#### **English IV Honors**

Credit: 1 Carnegie Unit

Prerequisites: English I Honors, English II Honors, English III Honors

This course is an examination of British and world literature through reading short stories, novels, drama, poetry, and essays. Students will respond orally and in writing to the literature through literary, political, and cultural analysis. Using the Project Based Learning Approach (PBL), students will connect their reading and writing to their own personal experiences as well as current events. Additionally, students of this course will build upon their writing ability by mastering the writing process and the use of Standard Written English. Also, the English IV honors course requires summer reading, a minimum of 400 pages per nine weeks (a block semester) of outside reading, and entry into a minimum of two contests or competitions. The course covers a rigorous pace and requires daily homework.

#### **AP Literature and Composition**

Credit: 1 Carnegie Unit

Prerequisites: English I Honors, English II Honors

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. Upon completing the AP English Language and Composition course, then, students should be able to:

- analyze and interpret samples of good writing, identifying and explaining an author's use of rhetorical strategies and techniques;
- apply effective strategies and techniques in their own writing;
- create and sustain arguments based on readings, research and/or personal experience;
- write for a variety of purposes;
- produce expository, analytical and argumentative compositions that introduce a complex central idea and develop it with appropriate evidence drawn from primary and/or secondary sources, cogent explanations and clear transitions;

- demonstrate understanding and mastery of standard written English as well as stylistic maturity in their own writings;
- demonstrate understanding of the conventions of citing primary and secondary sources;
- move effectively through the stages of the writing process, with careful attention to inquiry and research, drafting, revising, editing and review;
- write thoughtfully about their own process of composition;
- revise a work to make it suitable for a different audience;
- analyze image as text; and
- evaluate and incorporate reference documents into researched papers.

(abridged from: College Board course description)

#### **AP Language**

Credit: 1 Carnegie Unit

Prerequisites: English I Honors, English II Honors

An AP English Literature and Composition course engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. To that end, writing instruction includes attention to developing and organizing ideas in clear, coherent and persuasive language. It includes study of the elements of style. And it attends to matters of precision and correctness as necessary. Throughout the course, emphasis is placed on helping students develop stylistic maturity, which, for AP English, is characterized by the following:

- a wide-ranging vocabulary used with denotative accuracy and connotative resourcefulness;
- a variety of sentence structures, including appropriate use of subordinate and coordinate constructions;

- a logical organization, enhanced by specific techniques of coherence such as repetition, transitions, and emphasis;
- a balance of generalization with specific illustrative detail; and
- an effective use of rhetoric, including controlling tone, maintaining a consistent voice, and achieving emphasis through parallelism and antithesis.

# Mathematics

#### Grade 6 Math (7th grade curriculum)

In Grade 7 Honors Mathematics, instructional time focuses on four critical areas: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples as described in the Common Core State Standards (CCSS).

### Grade 7 Math (Pre-Algebra)

In the Pre-Algebra curriculum, instructional time should focus on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two-and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem, according to the Common Core State Standards (CCSS).

#### Algebra I

Credit: 1 Carnegie Unit Prerequisite: Pre-Algebra Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. The concept of function is emphasized throughout the course. Topics include: (1) operations with real numbers, (2) linear equations and inequalities, (3) relations and functions, (4) polynomials, (5) algebraic fractions, and (6) nonlinear equations.

#### Geometry

Credit: 1 Carnegie Unit Prerequisite: Algebra I

During high school, students begin to formalize their geometry experiences from elementary and middle school, using more precise definitions and developing careful proofs. Properties and relationships of geometric objects include the study of four key areas: (1) points, lines, angles, and planes; (2) polygons, with a focus on quadrilaterals, triangles, and particularly right triangles; (3) circles; and (4) polyhedra and other solids. Analytic geometry connects algebra and geometry, resulting in powerful methods of analysis and problem solving. Geometric shapes can be described by equations, making algebraic manipulation into a tool for geometric understanding, modeling, and proof. Dynamic geometry environments provide students with experimental and modeling tools that allow them to investigate geometric phenomena in much the same way as computer algebra systems allow them to experiment with algebraic phenomena.

#### Algebra II

Credit: 1 Carnegie Unit Prerequisite: Algebra I

Algebra II is a continuation and expansion of Algebra I content. Major topics include set theory, field

properties and theorems, systems of linear equations and inequalities, quadratics and the complex number system, rational equations, radicals and rational exponents, sequences and series. Multiple representations and technology are used to support and extend the content being studied, especially with respect to the study of functions: absolute value functions, piecewise functions, quadratic functions, polynomial functions, exponential functions, and logarithmic functions.

#### **Precalculus - Functions**

Credit: 1 Carnegie Unit Prerequisite: Algebra II

This course expands the concepts pertaining to functions that were taught in earlier grades and provides a review of essential mathematical skills and algebraic concepts needed in this course and in future courses. Functions are presented through several units: (1) Functions and Graphs; (2) Polynomial, Power, and Rational Functions; (3) Exponential, Logistic, and Logarithmic Functions. Each type of function is analyzed based on its algebraic and graphic characteristics and properties. The course presents a rigorous study of functions through multiple representations: graphs, tables of values, algebraic equations, and verbal descriptions. Emphasis is placed upon analyzing each function and using that information to sketch the graphs. Functions that model physical phenomena are used as examples to study the concepts of domain, range, and function composition. Technology is used to support and extend the concepts to be studied.

#### **Precalculus - Functions / Statistics**

Credit: 1 Carnegie Unit Prerequisite: Algebra II

This course expands the concepts pertaining to functions that were taught in earlier grades and provides a review of essential mathematical skills and algebraic concepts needed in this course and in future courses, particularly as preparation for calculus. Topics include four key areas: (1)

trigonometric functions and analytic trigonometry; (2) vectors, parametrics, and the polar and complex number systems; (3) matrices; (4) an introduction to discrete mathematics and the foundations of calculus. There is a heavy focus on triangular models of trigonometry: right triangle trigonometric ratios, as well as oblique triangle relationships found in the Law of Sines and the Law of Cosines. Probability, normal distributions, and conics are briefly covered. Technology is used to support and extend the concepts to be studied.

#### **AP Calculus AB**

Credit: 1 Carnegie Unit Prerequisite: Pre-Calculus

AP Calculus AB aims to develop students' understanding of the major concepts of calculus (limits, continuity, derivatives, integrals, approximation) and to provide experience with its methods and applications. The course emphasizes a multirepresentational approach in which problems and results are expressed graphically, numerically, analytically and verbally. Students' learning is enhanced with, though not overshadowed by, use of the graphing calculator. Students who successfully complete this course and its nationally-administered exam generally receive credit for one or two semesters of college-level calculus.

#### **AP Statistics**

Credit: 1 Carnegie Unit Prerequisite: Pre-Calculus

AP Statistics introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. In this course, students are exposed to the following four conceptual themes:

- 1. Exploring Data: Describing patterns and departures from patterns
- 2. Sampling and Experimentation: Planning and conducting a study

- 3. Anticipating Patterns: Exploring random phenomena using probability and simulation
- 4. Statistical Inference: Estimating population parameters and testing hypotheses

Students who successfully complete this course and its nationally-administered exam may receive credit for a one-semester introductory college statistics course.

# Science

### **Science 6 Honors**

Sixth grade students investigate the principles of physical science through activities, projects and focused learning. Students learn to apply the scientific method to solve problems and collect data in a variety of laboratory experiments.

#### Science 7 (Life Science) Honors

Seventh grade students investigate the science of living things through activities, projects, and focused learning.

#### Science 8 (Earth Science) Honors

Prerequisite: Completion of 7th grade Science

Through a project based curriculum and hands-on laboratory exercises students will cover topics such as introductory physical science, structure of the Earth, Earth history, Earth in the solar system, as well as, science and the environment.

### **Physical Science Honors**

Credit: 1 Carnegie Unit Prerequisite: Completion of Science 8

The course will integrate earth science concepts with physical science concepts through a project based curriculum and hands-on laboratory exercises. The topics covered will include measurement

and symbolic representation, atomic structure, properties of matter, chemical reactions, forces and motion, and energy.

#### **Biology Honors**

Credit: 1 Carnegie Unit Prerequisite: Physical Science

Students will investigate the molecular basis of Biology in a project-based curriculum and through hands-on laboratory exercises. The course will cover topics such as the cell, the molecular basis of heredity, biological evolution, interdependence of organisms, systems and behaviors of organisms, as well as, personal and community health.

#### **Chemistry Honors**

Credit: 1 Carnegie Unit Prerequisite: Biology

Students investigate the properties of matter through hands on laboratory experiments and classroom discussions. Students are expected to master the ability to describe chemical reactions through balanced equations and perform routine chemical calculations. Students have access to a variety of technology to enable to data collection, analysis, and presentation of results in multimedia and collaborative platforms.

#### **Physics Honors**

Credit: 1 Carnegie Unit Prerequisite: None

Physics is the study of the fundamental laws that determine the workings of the universe. The topics covered include: motion, force, gravity, momentum, energy, heat, fluids, waves, light, optics,

electricity, magnetism, and the structure of the atom. Basic trigonometry is integral to the course and it will be reviewed as needed. Critical thinking skills are developed through labs and projects. An independent project is required for honors credit.

#### Human Anatomy and Physiology Honors

Credit: 1 Carnegie Unit Prerequisite: Biology

This intensive course will focus on structural and functional relationships of the human organism at the cellular, tissue, organ and system levels. The course will review general principles of biology. The course will include a detailed study of the skeletal, cardiovascular, muscular, and nervous systems of humans.

#### **AP Biology**

Credit: 1 Carnegie Unit Prerequisite: Biology

AP Biology is a one-year equivalent college course that merges rigor with creativity and offers students myriad opportunities for learning through scientific inquiry and the development of laboratory skills. Students investigate 6 topic areas: the chemistry of life, cells, cell processes, genetics, evolution, biodiversity, and ecology.

#### **AP Chemistry**

Credit: 1 Carnegie Unit Prerequisite: Chemistry

AP Chemistry is a year-long college level general chemistry course that provides rigorous study and learning through scientific inquiry and technology. Students will demonstrate a basic understanding of, and the ability to apply, mathematical solutions to problems involving atomic theory and structures, chemical bonding, nuclear chemistry, kinetic theory, solutions, reaction types, stoichiometry, equilibrium, kinetic, thermodynamics, and descriptive chemistry.

# **Social Studies**

#### Social Studies 6 (World History) Honors

This course covers topics in World history, from hunter-gatherers through the Reformation. The course also investigates basic geographical skills and the analysis of primary documents.

#### Social Studies 7 (American History) Honors

This course covers topics in American history, from the country's birth through the nineteenth century. The course also investigates the United States' global relationships, foreign policy, and current events. The role of a citizen, geographic influences on the nation's development, and the development and responsibilities of the branches of government are also emphasized.

#### Social Studies 8 (Louisiana History) Honors

Credit: 1 Carnegie Unit Prerequisite: Completion of 7th grade

The study of history, geography, civics, sociology, economics, culture and other social-science subjects that concludes the study these topics in the middle school years. Some link to Louisiana is established in order to make the concepts more relatable for the students. Students will cover: early settlers in Louisiana, European colonization, Acadian History, Louisiana Purchase, statehood, Civil War, Reconstruction, WWII home front, Civil Rights, and other contemporary trends and issues.

#### **World Geography Honors**

Credit: 1 Carnegie Unit Prerequisite: Completion of 7th grade All students must complete one year of World Geography during the high school years (9th-12th). Students learn through a problem-solving approach to determine the connections between economics and several problems in societies around the world, such as health, literacy, infant mortality, and other issues through the use of primary and secondary sources, other readings, audio and visual resources and class discussions. Students then solve the identified problems while also identifying and solving issues dealing with physical geography--geomorphology, hydrology, continental drift etc. Geographical tools and their study are also emphasized in this course. Examples would include, but not be limited to cartography, GIS, GPS. Students will come away with prerequisite knowledge for further geographical studies.

#### **Civics Honors**

Credit: 1 Carnegie Unit Prerequisite: None

All students must complete one semester of Civics during the high school years (9th-12th). Students learn, through a problem-solving, project-based approach about the Constitution and its beginnings; political parties and elections; individual rights, federalism and the three branches of government; and state and local government. Important U.S. Supreme Court Cases are studied in depth to show how judicial review determines the constitutionality of legislation. It is now linked with Free Enterprise (Economics).

#### **United States History Honors**

Credit: 1 Carnegie Unit Prerequisite: Completion of 10th grade

This course focuses on United States history from the end of Reconstruction (1877) to present day. Students will explore the eras of industrialization, progressivism, World War I and II, the Great Depression and New Deal, the Civil Rights era and the Cold War using a variety of primary sources and projects designed to challenge and ignite student thinking. Students are required to participate in an American History themed competition and critically read a number of historical fiction and nonfiction texts.

#### **World History Honors**

Credit: 1 Carnegie Unit Prerequisite: Completion of 9th grade

The study of history, geography, civics, sociology, economics, culture and other social-science subjects related to World History (1350 C.E through the present Students will cover: Renaissance, Reformation, Scientific Revolution, and Age of Enlightenment, Age of Exploration, Agricultural Revolution, Industrial Revolution, influential nations and empires, prevalent political and economic systems of the 1900s, global conflict, and other contemporary trends and issues, WWI, interwar years, and WWII.

#### **AP United States History**

Credit: 1 Carnegie Unit Prerequisite: United States History

Students will be challenged with a rigorous and fast-paced study of the history of our country from Pre-Colombian contact to current day. Through readings ( both primary and secondary), and the writing of document based questions and free response questions, student will be able to receive college credit if they successfully score a 3 or higher on their Advanced Placement exam taken at the end of the course.

#### **AP Human Geography**

Credit: 1 Carnegie Unit Prerequisite: World Geography The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).

# **Foreign Languages**

#### **Spanish I Honors**

Credit: 1 Carnegie Unit Prerequisite: Completion of 7th grade

Students will learn the basics of the Spanish language. They will make use of video and audio resources, on-line grammar resources in addition to working on traditional pen and paper exercises, oral drilling and live face-to-face practice. The course includes grammar, vocabulary, writing, and listening and speaking skills. The culture of Hispanic America and Spain also forms a significant part of the course. The students will be using the textbook ¡Avancemos! Uno! They will be given online access and passwords to electronic workbooks, textbooks and self-check assessments. Sound recordings from native speakers will complement the vocabulary lessons, and an integrated DVD program will link the exercises to real life situations and lively conversations.

#### **Spanish II Honors**

Credit: 1 Carnegie Unit Prerequisite: Spanish I

Spanish II is an intermediate-level course which adheres to the Louisiana Content Standards and Benchmarks for Foreign Language Courses. As in Spanish I, we will continue to focus on Spanish as a collection of four skills: listening, speaking, reading, and writing. The aim of this course is to strengthen these skills, thus enabling students to communicate in a great variety of situations. Spanish II will begin with a brief initial review of key concepts taught in Spanish I. We will use the textbook ¡Avancemos! Dos! which builds directly on the materials and methods used in Spanish I. Students will improve auditory skills by listening to dialogues/narratives recorded by native speakers of Spanish from a variety of Spanish-speaking countries, as well as by watching and modeling video clips. Students will also read in Spanish on topics of a practical nature, such as advertisements, tourist information, newspaper/magazine articles, signs, menus, and business/personal letters. Students' progress will be evaluated according to workbook and audio exercises, class presentations, dramatic performances, active participation in discussions, and frequent quizzing. Project Based Learning will be used, where possible, to support students in the course.

#### **Spanish III Honors**

Credit: 1 Carnegie Unit

Prerequisite: Spanish II (and native speakers upon consultation)

This course is set up to meet the needs of college-preparatory high school students. Students will use the third year level textbook ¡Avancemos! Tres! and the literature reader Album Cuentos del mundo. They will be given online access and passwords to workbooks, textbooks and self-checking assessments, which includes all the new material presented in the textbook. While students will still be working on the four basic language skills (listening, speaking, writing, reading) they will learn to make use of language that goes beyond casual conversation, such as the subjunctive voice. They will learn how Spanish differs from country to country. Spanish III has two major projects which involve the reading, interpretation and presentation of Spanish literature from 1900-present day authors, and will create portfolios to display literary concepts obtained throughout the course.

### **Arts and Music**

#### **Talented Theatre (1-4)**

Credit: 1 Carnegie Unit

Prerequisite: Admittance to the Talented Theatre Program

The Talented Theatre courses are developed for students who have tested into the Talented Theatre Program and have a current IEP with a Theatre certification. Primary emphasis will be placed on the development of acting technique through monologue work, scene study, and short play performance. Through this source material, students can expect intense focus on moment to moment reality, subtext, and 'reactive' acting. From course to course, secondary emphases will involve script analysis, playwriting, and improvisation. The Talented Theatre courses will serve as resource for Talented Theatre students. Any student wishing to be tested for the Talented Theatre program should contact the theatre instructors for more information.

#### Drama

Credit: 1 Carnegie Unit Prerequisite: None

Drama is a theatre course for all Taylor (HS) students who have an interest in Performing Arts. Students can expect an introduction to acting technique - objective, motivation, and investment. They will learn to comprehend the language all performers speak. Performance requirements will include at least one monologue and one scene per semester. Other aspects of study will include theatre history, script analysis, improvisation and elements of theatre critique.

#### **Talented Visual Arts (1-4)**

Credit: 1 Carnegie Unit

Prerequisite: Admittance to the Talented Visual Arts Program

Studio exploration and experiences in the elements and principles of visual design, using a variety of media, to develop and broaden the student's demonstrated artistic skills, critical abilities, and creative

talent. Identification as a Talented in the Visual Arts student with a current IEP for individualized instruction is required.

#### **Fine Arts Survery**

Credit: 1 Carnegie Unit Prerequisite: None

A survey course of art from prehistory to the present which emphasizes understanding works of art within their historical and cultural context. Visual analysis and critical thinking are used as tools for understanding this relationship. Painting, sculpture, and architecture of Western Europe and the Americas will be emphasized to provide deeper understanding and appreciation of the arts in our contemporary life and culture.

#### **Beginning Band**

Credit: 1 Carnegie Unit Prerequisite: None

#### (Grades 6-12, Beginners/Novice)

This course is designed for students who may wish to learn to play a band instrument or students who are in the early stages of instrumental music development. Basic playing fundamentals of tone, rhythm, counting, and technique are emphasized. Students DO NOT need to have taken any accredited music classes prior to enrollment in this course. Students completing this course are eligible for the more advanced concert bands and marching band.

#### **Intermediate Band**

Credit: 1 Carnegie Unit Prerequisite: Beginning Band or equivalent experience

(Grades 6-12)

This course is designed for students who desire to develop the skills acquired in beginning band. Students will develop techniques needed for performing more challenging music. Students will have opportunity to perform in solo, small group, and large band settings, and are eligible for District VI Honor Band Auditions. Members of this band combine with other students to form the Taylor Tiger Band, and will actively participate in school functions, one carnival parade, two annual concerts, and graduation. Maximum of four hours per week, combined, are required outside the school day for individual (homework) and group practice.

#### **Advanced Band**

Credit: 1 Carnegie Unit Prerequisite: Intermediate Band

This course is designed for students who desire to develop mastery level skills in music performance. Students will develop advanced techniques needed for performing very difficult and diverse genres of music. Students will have opportunity to perform extensively in solo, small group, and large band settings. Students will study marching techniques, solo/ensemble literature, and are eligible for District VI Honor Band and Louisiana All-State Band auditions. Members of this band combine with other students to form the Taylor Tiger Band, and will actively participate in school functions, one carnival parade, two annual concerts, and graduation. Maximum of four hours per week, combined, are required outside the school day for individual (homework) and group practice.

#### **AP Music Theory**

Credit: 1 Carnegie Unit Prerequisite: None

This course is designed to develop student skills in music notation writing, chord structure, melodic structure, aural sequence ear training, sight-singing, score analysis, and music composition. Students enrolled in this course should have a strong music background (ensemble setting) or private music lesson background.

# Technology

#### **Powerskills (grade 6)**

The PowerSkills course teaches 21st century skills discretely in the context of core subjects and 21st century interdisciplinary themes. It focuses on providing opportunities for applying these skills across content areas and for a competency-based approach to learning. Furthermore, PowerSkills enables innovative learning methods that integrate the use of supportive technologies, inquiry- and problem-based approaches and higher order thinking skills, while encouraging the integration of community resources beyond school walls.

#### Web Mastering

Credit: 1 Carnegie Unit Prerequisite: None

The Web Mastering course is a project-based curriculum that teaches digital communication skills in the context of the professional web design and development process, using Microsoft web tools. The course develops four key skill areas:

- Project management and collaboration
- Design
- Research and communication
- Professional web-authoring tools

During the course, students will create a digital portfolio and work on the school web site http://pftsta.com, among a variety of other projects.

### **Computer Science Independent Study (How to Make Almost Anything)**

Credit: 1 Carnegie Unit Prerequisite: None

The Computer Science Independent Study course provides students with the opportunity to design a program of study that is more responsive to their academic, personal, and social needs. This option allows students the freedom to explore, research, and develop skills based on their individual needs and interests. The student's needs and interests will be reflected in the written agreement for independent study. The student and parent can have input into the kinds of completed work assignments for which the student will be responsible and which demonstrate what has been learned, what skill or competency has been acquired, or what knowledge has been gained. The course is currently taught in the Phyllis M. Taylor Fab Lab, where students have access to several 3D printers, an epilogue laser cutter, vinyl cutters, Arduinos, Raspberry Pis, and Makey Makeys.

#### **AP** Computer Science

Credit: 1 Carnegie Unit

Prerequisites: Algebra I, Algebra II preferred, competence in written communication

The goals of the AP Computer Science A course are comparable to those in the introductory course for computer science majors offered in many college and university computer science departments. It is not expected that all students in the AP Computer Science A course will major in computer science at the university level. The AP Computer Science course is intended to serve both as an introductory course for computer science majors and as a course for people who will major in other disciplines and want to be informed citizens in today's technological society. The following goals apply to the AP Computer Science course.

Students should be able to:

- design, implement, and analyze solutions to problems.
- use and implement commonly used algorithms.
- use standard data structures.

- develop and select appropriate algorithms and data structures to solve new problems.
- write solutions fluently in an object-oriented paradigm.
- write, run, test, and debug solutions in the Java programming language, utilizing standard Java library classes and interfaces from the AP Java subset.
- read and understand programs consisting of several classes and interacting objects.
- read and understand a description of the design and development process leading to such a program. (Examples of such solutions can be found in the AP Computer Science Labs.)
- understand the ethical and social implications of computer use.

# P.E./Health

#### **Physical Education**

Credit: 1/2 or 1 Carnegie Unit Prerequisite: None

All 8th graders must take P.E. All students must complete two years of P.E. during the high school years (9th-12th). Physical education gives the students building blocks for good health: physical fitness and skills, coordination, and good sportsmanship. Students will to learn to assess their own physical fitness and maintain healthy levels of physical activity. They will learn new skills and improve performance, while gaining the self discipline to take part in individual and group activities. Students, who participate in physical education activities on a regular basis, learn the benefits of that participation and value its contribution to a healthy lifestyle.

#### **Health Education**

Credit: 1/2 Carnegie Unit Prerequisite: None All students must complete one semester of Health during the high school years (9th-12th). Health education gives students the knowledge and skills to thrive physically, mentally, emotionally, and socially. It will help the students to recognize the causes of ill health and to understand the benefits of prevention, good hygiene, and appropriate medical care. Health education also includes a set of skills to help students to be better aware of the decisions they face of conflicting messages, thus assisting them to live healthier lives.

#### **Advanced Physical Education**

Credit: 1 Unit Elective Prerequisite: P.E. 1 & 2

Advanced Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in specific areas. The student will participate in activities that include (1) health-related fitness activities (cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition), (2) team sports, (3) individual or dual sports, (4) aquatics and (5) outdoor pursuits. It includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluations. Advanced PE is open to Juniors or Seniors who have successfully completed PE 1 & 2.

# **General Electives**

#### **Senior Project**

Credit: 1 Carnegie Unit Prerequisite: None An elective that results in an academic endorsement on the high school diploma. At the end of their junior year, students consider a research question in an area of interest. Senior students choose a mentor to advise their investigation and write an extensive research paper in class. Students complete twenty hours of internship off-campus, providing them with an opportunity for hands-on experience in the field of study. As a result of the internship, students assemble a portfolio and product and present their work to a panel of judges from the community.

#### **Project Lead the Way (PLTW)**

Project Lead the Way's pre-engineering / engineering program complements our mathematics and science courses while emphasizing critical thinking, creativity, innovation, and real-world problem solving. Instructional activities are designed for hands-on learning that engages students on multiple levels, exposes them to areas of study that they may not otherwise pursue, and provides them with foundations and proven paths to post-secondary training and career success in STEM-related fields. As the world changes, so does the PLTW curriculum. Plans are being made to expand the Taylor Academy engineering program in the coming years, but for now this is what it currently looks like at Taylor.

#### Gateway to Technology I (GTT-I)

Gateway to Technology is our middle school program of study. We currently provide one course containing two main units of study: (1) Design and Modeling, and (2) Science of Technology. The focused and engaging activities in this course develop students' innovative, critical, and creative thinking, as well as their collaboration and problem-solving skills. In the Design & Modeling unit, students explore a variety or engineering fields through research and student-led presentations. They learn technical sketching techniques and apply the design process to solve problems as they begin to understand the influence of creativity and innovation in their lives. They work in teams on design projects, capturing research and ideas in their engineering notebooks. Using Autodesk design software, students create virtual images of their designs and produce portfolios to showcase their innovative solutions. In the Science of Technology unit, science impacts the technology of yesterday,

today, and the future. Students research and apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects. Hands-on STEM learning activities include making ice cream and cleaning up oil spills, while online research about nano-technology provides students with the knowledge needed to develop their own Fact or Fiction games.

#### **Introduction to Engineering Design (IED)**

Credit: 1 Carnegie Unit Prerequisite: None

Introduction to Engineering Design is our entry level high school course with a major focus on the design process and its application, providing the necessary foundation for higher level engineering courses. Students work both individually and in teams as they use industry standard 3D modeling software, Autodesk Inventor, to help them design solutions to self-proposed problems and communicate their solutions to peers and members of the community. Through these hands-on projects, students apply engineering standards and document their work using an engineer's notebook. As a culminating activity, students construct a digital portfolio of their best work.