

## Course Selection Worksheet

<b>English II</b>			
<input type="checkbox"/> College Prep <input type="checkbox"/> Honors <input type="checkbox"/> Expository Writing <i>(This 1 semester course may be recommended in addition to College Prep English II)</i>			
<b>Math</b>			
<input type="checkbox"/> Geometry College Prep <input type="checkbox"/> Geometry Honors		<input type="checkbox"/> Algebra II College Prep <input type="checkbox"/> Algebra II Honors	
<b>Science</b>			
<input type="checkbox"/> Anatomy and Physiology <input type="checkbox"/> AP Environmental Science* <i>*Students in Collegiate Academy should NOT enroll in AP Environmental Science</i>		<input type="checkbox"/> Chemistry College Prep* <input type="checkbox"/> Chemistry Honors* <i>*Must be concurrently enrolled in Algebra II</i>	
<b>Social Studies</b>			
<input type="checkbox"/> World History College Prep <input type="checkbox"/> World History AP			
<b>Theology II</b>			
<b>World Language</b>			
<input type="checkbox"/> Russian I <input type="checkbox"/> Russian II <input type="checkbox"/> Russian III <input type="checkbox"/> Adv Russian	<input type="checkbox"/> Spanish I <input type="checkbox"/> Spanish I Honors <input type="checkbox"/> Spanish II <input type="checkbox"/> Spanish II Honors	<input type="checkbox"/> Spanish III <input type="checkbox"/> Spanish III Honors <input type="checkbox"/> AP Spanish Language	
<b>Health</b> <i>This is a 1 semester course (0.5 credits)</i>			
<b>Electives*</b>			
<input type="checkbox"/> Dance <input type="checkbox"/> Strength <input type="checkbox"/> Yoga <input type="checkbox"/> Intro Art <input type="checkbox"/> Draw/Paint <input type="checkbox"/> Adv Paint <input type="checkbox"/> Photo I <input type="checkbox"/> Photo II	<input type="checkbox"/> Film I <input type="checkbox"/> Yearbook** <input type="checkbox"/> Studio Art AP** <input type="checkbox"/> Band Fund.** <input type="checkbox"/> Adv Band** <input type="checkbox"/> Adv Honors Band** <input type="checkbox"/> Strings** <input type="checkbox"/> Adv Strings**	<input type="checkbox"/> Adv Honors Strings** <input type="checkbox"/> Choir <input type="checkbox"/> GeoTech <input type="checkbox"/> Gaming <input type="checkbox"/> Graphics/Animation <input type="checkbox"/> Graphic Design I <input type="checkbox"/> Graphic Design II <input type="checkbox"/> Robotics <input type="checkbox"/> Adv Robotics	<input type="checkbox"/> Engineering I <input type="checkbox"/> Engineering II <input type="checkbox"/> Video Production I <input type="checkbox"/> Video Production II <input type="checkbox"/> Web Design <input type="checkbox"/> Adv Tech <input type="checkbox"/> Animals & Humans <input type="checkbox"/> Sports Medicine** <input type="checkbox"/> ACT/SAT

\*Many electives are 1 semester (0.5 credits) unless otherwise indicated.

\*\*Year-long elective (1.0 credits)

Students should select enough classes to complete 8 credits in 10<sup>th</sup> grade.

Students may login to PlusPortals and begin to make course selections by clicking on the Course Request tab at the top of the dashboard. Parents, please [click here](#) to view how to approve your child's course requests in PlusPortals. This will be available to you beginning March 3, 2021.

## ENGLISH

### English II College Prep

The focus of English II is centered on important literary works, both ancient and modern, from various cultures and locations around the world. The diverse selections from a variety of genres are studied in their historical and geographic contexts. In addition to focusing on reading comprehension, students will continue to develop their writing skills through analytical writing activities and a research project. Ongoing development of grammar and vocabulary skills is also emphasized.

### English II Honors

*Prerequisite: English I or English I Honors and departmental approval*

English II Honors is designed to aid the serious English student in the development of the analytical and writing skills necessary for further English AP coursework. The content of this class is the same as the 022 English II however more extensive reading selections will be required. Grammar skills are assumed and the development of vocabulary skills is ongoing.

### Expository Writing

*Prerequisite: Departmental approval, Grades 9-11*

#### *Semester Course*

The Expository Writing class is designed to prepare selected students for the rigorous writing requirements of high school in a smaller, more specialized setting. Emphasis placed on the writing process includes grammar and syntax, topic selection, thesis development, thesis support, embedding, parenthetical documentation, MLA format and citation, editing, and proofreading. Upon completion of the class, students will be expected to produce more unified, coherent, and well-developed essays and research papers that meet the requirements of the Bishop Dunne English department.

## MATH

### Geometry College Prep

*Prerequisite: Algebra I*

Geometry is designed to provide each student with knowledge of the basic principles, postulates, and theorems of Euclidean Geometry. Each student will learn to write a proof, read figures, draw three-dimensional shapes and apply algebraic concepts to geometric problems. Students will also apply the concepts learned to real life applications and problems.

### Geometry Honors

*Prerequisite: Algebra I and Teacher Recommendation*

Geometry Honors is the study of the postulates and theorems set down by Euclid. Applications of these principles are shown by the student's ability to read figures and to write proofs. The course provides an in-depth study of the deductive method of reasoning and abstract thinking. The course includes plane, solid, and coordinate geometry.

### **Algebra II College Prep**

*Prerequisite: Algebra I and Geometry (prerequisite or concurrent enrollment)*

Algebra II covers the structure of the real number system and the complex number system. The concepts of functions are further developed including linear, quadratic, exponential, and logarithmic functions. Stress is placed on developing deductive reasoning abilities and precision of language in communications. Students will be given a foundation for future studies in mathematical, scientific, business, and technical fields.

### **Algebra II Honors**

*Prerequisite: Algebra I, Geometry (prerequisite or concurrent enrollment), and department approval*

The Algebra II Honors course is basically the same course content as the Algebra II course; however, it is a course for the student who is gifted mathematically. Therefore, the subject areas that are covered will provide greater depth and greater challenge.

## **SCIENCE**

### **Anatomy and Physiology**

*Prerequisite: Biology I*

Anatomy and Physiology is an advanced course in biology. Major emphasis is on the structure and functions of the human body systems with pathology included. Laboratory work includes animal dissection for comparative analysis.

### **Environmental Science AP**

*Prerequisite: departmental approval and Biology I*

*Students in the Collegiate Academy should NOT enroll in this course as they are required to take Environmental Science through Dallas College in the senior year.*

The goal of the AP Environmental Science course is to provide students with the 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.

## **Chemistry I College Prep**

*Prerequisite: Algebra I and Algebra II (may be concurrent)*

Chemistry I is a laboratory-oriented course that focuses on the scientific method and the importance of precise and accurate measurements. The course includes discussion of inorganic matter, chemical formulas, the mole concept, chemical reactions, atomic structure, chemical bonding and an introduction to organic chemistry.

## **Chemistry I Honors**

*Prerequisite: Algebra I, Algebra II (may be concurrent), and department approval*

This course teaches the structure and properties of matter, with a focus on inorganic chemistry. Topics include colligative properties, acid-base chemistry, electrochemistry, and nuclear chemistry. Advanced subjects include elementary thermodynamics, chemical equilibrium, and an introduction to organic chemistry. Laboratory work includes an introduction to AP Chemistry labs.

## **SOCIAL STUDIES**

### **World History College Prep**

This introductory survey course traces the evolutionary development of man from the earliest historic times through the twentieth century. This course follows the guidelines from the World History Association, emphasizing globalization and the interaction between the world's various cultures and regions. Appropriate emphasis will be placed on the development and application of basic social studies skills.

*Dual Credit through Dallas College available for qualifying students.*

### **World History AP**

*Prerequisite: departmental approval*

AP World History is a college-level survey that de-emphasizes European history and incorporates more global trends. Students are expected to master critical thinking skills and argumentative writing, as well as document analysis. Emphasis is placed on the AP curriculum in preparation for the AP test in May. Students will be expected to learn and master computer application programs and mapping technology. Students are expected to participate in class discussions, debates, and in-class presentations. The reading and writing expectations of this course are extensive, and the class is very fast-paced.

*Dual Credit through Dallas College available for qualifying students.*

## **THEOLOGY**

### **Theology II**

The sophomore course of study focuses on the Paschal Mystery of Christ and what it means to be the Church. Students will focus on Jesus' redemptive power seen through his life, death and resurrection, and how we, who share in Jesus' redemptive power, can be shaped by it, and, in turn, are called to shape the world. Students will study the Church, its origin, its structure, the Marks of the Church, and its mission, and come to understand why belonging to, why "being Church" is essential.

## **WORLD LANGUAGE**

### **Russian I**

In this beginners' Russian language course, students will learn the Cyrillic alphabet and the fundamentals of Russian pronunciation. Students will acquire knowledge of the language through the use of varied activities that develop contemporary conversational, reading and writing skills. The course also provides an introduction to modern Russian culture.

### **Russian II**

Russian II builds on the foundation established in Russian I by expanding vocabulary, grammatical, reading, writing and speaking knowledge and skills. This course will stress detailed examination of the Russian Language and culture based on multimedia material used in Russian I. Students will acquire additional proficiency and fluency in speaking, reading, and writing Russian in practical situations.

### **Russian III**

This course further develops skills learned in Russian II, with an emphasis on acquiring more advanced writing, speaking, reading, and listening skills. Accuracy in these four target areas will be emphasized through the study of grammar, vocabulary, and culture. Students will read passages from Russian literature while also learning practical uses of Russian for conversational purposes.

*Bishop Dunne is investigating options for this course to receive Dual Credit through Dallas College available for qualifying students.*

### **Spanish I College Prep**

As a beginning course for college-bound students, Spanish I seeks to develop fundamental skills in the four basic areas of language: speaking, understanding, reading, and writing. It includes an introduction to the culture of the Spanish-speaking world.

### **Spanish I Honors**

Prerequisite: Teacher Recommendation

This course is designed to build upon fundamental listening and speaking capabilities of students. The course will also develop and increase underlying skills in reading, spelling, and writing competency and creativity while improving overall language skills for use with mass communication and daily life situations.

### **Spanish II College Prep**

*Prerequisite: Spanish I*

Spanish II continues the development of skills in all four areas of language, as well as cultural studies in the native language.

### **Spanish II Honors**

*Prerequisite: Spanish I Honors and Teacher Recommendation*

This second course is designed to build upon the fundamental listening and speaking capabilities that were strengthened in Spanish I Honors. The course will also further develop and increase the underlying skills that were augmented in reading, spelling, and writing competency and creativity while improving even further overall language skills for use with mass communication and daily life situations.

### **Spanish III College Prep**

*Prerequisite: Spanish II*

Continuing the study of culture as well as the development of skills in all four areas of language, Spanish III seeks to prepare the student for achievement tests for advanced placement in college.

*Dual Credit through Dallas College available for qualifying students.*

### **Spanish III Honors**

*Prerequisite: Spanish II H and Department Approval*

This course is designed for the serious students of Spanish who wish to develop their proficiency in the language skills, but who need to work towards the mastery of those language skills. The content of this course will reflect the intellectual interests shared by the students and teacher (the arts, history, current events, literature, culture, sports, etc.) and will encompass both formal and informal language styles. Summer enrichment assignment required.

*Dual Credit through Dallas College available for qualifying students.*

### **Spanish Language AP**

*Prerequisite: Spanish III Honors, Spanish IV, or Advanced Spanish Conversation, and Department Approval*

Spanish Language AP is intended for students who wish to develop their proficiency in all four language skills: listening, speaking, reading, and writing. Course content may best reflect intellectual interests shared by the students and teacher (the arts, history, current events, literature, culture, sports, etc.).

The course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than to the mastery of any specific subject matter. This study will culminate with the student sitting for the AP Spanish Language exam in May. Summer enrichment assignment required.

## **HEALTH**

### *Semester Course*

This course is designed to assist individuals in analyzing health problems in their own school community situation with a view toward working out a well-coordinated health program to meet school and community needs. This course covers general physical, mental, and social health areas. Course is typically taken in 10<sup>th</sup> grade. This course can be completed through Dual Credit program at Dallas College in the summer upon completion of the TSI exam\*.

*Dual Credit through Dallas College available for qualifying students.*

## **ELECTIVES**

### **Physical Education Department**

#### **Dance**

##### *Semester Course (Spring Semester)*

Dance I is an introduction to contemporary, lyrical, hip hop, jazz, and modern dance technique. Students will learn conditioning exercises, basic dance warm ups and stretches, and perform lyrical and jazz combinations as a class. Students will also learn dance terminology, choreography, and history.

#### **Strength**

##### *Semester Course*

This course focuses on the different aspects and processes in maintaining a healthy lifestyle. Students will learn about the dietary needs of the human body and healthy eating. The students will learn the benefits of a fitness routine, ranging from weights to cardio-vascular exercise to movement exercises such as yoga and Pilates. The course will combine theory and practice, so the informed student will have the tools to pursue a healthier lifestyle.

#### **Yoga**

##### *Semester Course*

Yoga is a form of exercise that gets one in tune with the body's muscles, improves posture, expands breathing capabilities and aids in physical and mental well-being. Focused in developing strength, balance and flexibility, the semester-long course will help increase concentration levels and vitality as well as decrease stress and improve mental clarity. This class is geared toward beginners.

## **FINE ARTS**

### **Visual Arts**

#### **Introduction to Art**

##### *Semester Course*

Introduction to Art is an introductory studio drawing course with emphasis on developing basic drawing skills and fundamental design and composition concepts. In addition to technical skills, an exploration of creative thinking, problem solving, and critical analysis will be studied. Students will be encouraged to develop an expression of individual style.

#### **Drawing and Painting**

##### *Prerequisite: Intro to Art*

##### *Semester Course*

Drawing and Painting is an intermediate studio drawing and introductory painting course. Students will continue development of drawing skills and design principles learned in Art I, and will be introduced to painting tools and techniques. Color theory will be an integral part of the course studies and projects. Students will be encouraged to develop an expression of individual style.

#### **Advanced Painting**

##### *Prerequisite: Intro to Art and Drawing and Painting*

##### *Semester Course*

Advanced Painting is an advanced painting course for students who would like to continue to develop their painting skills. Further emphasis will be placed on color theory and composition. Students will be encouraged to develop an expression of individual style.

#### **Photography 1**

##### *Prerequisite: Intro to Art*

*Requirements: DSLR personal camera, laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

##### *Semester Course*



Photo 1 is an introductory digital photography course. Students will explore basic photography techniques, including an understanding of camera mechanics, digital manipulation, digital darkroom techniques, and design and composition concepts. Students will be encouraged to develop an expression of individual style. This course counts toward Fine Art OR Technology credit.

## **Photography 2**

*Prerequisite: Photo 1*

*Requirements: DSLR personal camera, laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

### *Semester Course*

Photo 2 is an intermediate photography course. Students will continue the development of digital photography and Photoshop skills learned in Art VII with an in-depth look at advanced photography techniques and design concepts. Students will be encouraged to develop an expression of individual style. This course counts toward Fine Art OR Technology credit.

## **Film I**

*Prerequisite: Intro to Art*

In this class, students will work with video cameras and digital editing to explore the art of telling a story in a visual/audio manner. Students will make short films and learn the technical aspects of the profession. The Filmmaking curriculum covers all areas of filmmaking: pre-production, production and post-production. In the pre-production area students will learn script writing. In the production area students learn about cameras, sound, and production techniques. In post-production they will learn digital editing, foley, ADR, and ambience. Students will study different types of genres and keep a film log analyzing Academy Award winning films. By the end of the class, they will have created a short film.

## **Yearbook**

*Prerequisite: Teacher Recommendation*

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

### *Year Long Course*

The Yearbook course at Bishop Dunne is an elective course that works toward the completion and selling of a large finished, printed product, which provides students with marketable experience in journalism, photography, digital image editing, and print media publishing. In class, students compose and edit all elements of the project, including formatted text, layout, graphic art, and digital photography. Students are assigned or elected to certain duties as well as pages in the book and must meet all deadlines imposed by the project manager or adviser. The course covers many of the content standards and objectives encountered in English courses, graphic arts, business, and computer technology courses. Students will learn journalism techniques, including layout and design, writing and

editing copy, headlines and picture captions, interviewing and reporting, and photography. Students will learn proofing strategies and work together to agree on the book's theme and layout. At times, deadlines may require that staff members work after school, on weekends, and holidays.

May be used as a technology or art credit.

## **Studio Art AP**

*Prerequisite: Intro to Art and departmental approval. Upper level art classes encouraged but not required.*

Studio Art AP is a year-long advanced studio course focusing on three major areas: a sense of quality in artwork, a concentration on a particular visual interest or problem, and the need for breadth of experience in formal, technical, and expressive means. The course is intended for highly motivated students who are seriously interested in the study of art.

All students will submit a complete portfolio in May. Summer assignment required.

## **MUSIC**

### **Band Fundamentals**

Band Fundamentals is offered to allow 9-12th grade students the opportunity to learn band fundamentals for winds or percussion before participating with the advanced band or percussion ensemble. Completion of this class should yield mature, informed, disciplined, and competent young musicians, prepared for advanced and marching band.

### **Advanced Band**

Advanced Band is for all 9-12th grade experienced musicians; the focus is on concert performance, preparations for auditions (high school and college), and more advanced literature. Completion of this class should yield mature, informed, disciplined, and competent young musicians, prepared to participate with college ensembles by the end of their senior year.

### **Advanced Honors Band**

*Prerequisite: Audition before music faculty and departmental approval*

Although mostly focused on grade 11 and 12 musicians, Advanced Honors Band is open to 9-12th grade experienced musicians. This class meets and prepares at the same time as the advanced band and includes advanced band expectations of advanced musicianship, a strong performance history as well as extra assignments. This class will be weighted at the 4.5 level.

### **Beginning String Orchestra**

Beginning String Orchestra (Violin, Viola, Cello, String Bass) is an exploratory class with emphasis on individual achievement as well as group performance standards. Students are asked to invest in their

musical studies to gain a genuinely enjoyable emotional, spiritual and musical time as well as help in academic achievements and teamwork abilities. No previous musical experience is necessary to join this class.

Students may receive one full high school Fine Art credit for successful completion of this course.

### **Advanced String Orchestra**

*Prerequisite: Audition or intermediate string orchestra*

Advanced String Orchestra (violin, viola, cello, string bass) synthesizes the lessons from beginning and intermediate orchestra classes into strategic directions and goals, individually and collectively. Performances include concerts at Bishop Dunne as well as competitive and invitational events both on and off campus. Students will be invited to consider long-term individual goals such as playing at family functions, regional or state competitions, as well as how these individual goals support the continued success of the string orchestra program at Bishop Dunne.

### **Intermediate String Orchestra**

*Prerequisite: Audition or Beginning String Orchestra*

Intermediate String Orchestra (violin, viola, cello, string bass) is the class that bridges beginning orchestra experience to the opportunities afforded the advanced orchestra musicians. Students play more complex music than beginning players and serve in more responsible ways—playing at worship services, local community events, etc. They also begin to see the myriad musical horizons that studying a string orchestral instrument allows them.

Students may receive one full high school Fine Art credit for successful completion of this course.

### **Advanced Honors String Orchestra**

*Prerequisite: Audition before music faculty and departmental approval*

Advanced Honors String Orchestra (violin, viola, cello, string bass) is the highest level of string orchestra playing on Bishop Dunne's campus. Students perform as a part of the Advanced String Orchestra while preparing leadership positions both musically and socially within the larger context of our orchestra program and Bishop Dunne musical family. Performing as a soloist, small ensemble member, and larger orchestra is expected of young people enrolled in this course.

### **Choir**

*Semester Course*

Choir is an introduction to music course designed to develop basic singing techniques, sight-reading skills, and music theory concepts. Students will perform at various important school functions throughout the year.

Students may receive one half high school Fine Art credit for successful completion of this course.

## **TECHNOLOGY**

### **Auto CAD**

#### *Semester Course*

This course will provide students the opportunity to master computer software applications, such as Computer Animated Design (CAD), in a variety of engineering and technical fields. This course further develops the process of engineering through and application of the design process.

### **Engineering 1**

*Prerequisite: Grades 10-12*

#### *Semester Course*

Students work through the design process using progressively sturdier materials. The process includes making technical drawings, creating supply lists, estimating costs, building scaled up models, followed by building full-scale constructs. Projects typically progress from paper, toothpicks, cardboard, and wood to mixed media. Students often build bridges, catapults, furniture, several types of vehicles, and final practical projects of their own choosing. Only upper-class students (10-12th grade) may choose this semester elective. Some building materials are supplied but specialty projects require student purchase of their own supplies.

### **Engineering 2**

*Prerequisite: AutoCAD or Engineering 1*

#### *Semester Course*

Students will apply design principles learned in CAD or Engineering to build and refine major projects. Students can choose to create machines, design, build or 3D print structures, develop programming sequences for complex tasks in ground or flight-based automated vehicles, or build out Arduino/raspberry pi projects. Students will work in a maker space environment to bring researched designs to fruition for both competition and use in practical settings ideally to aid in service learning scenarios. Many projects will require students to be responsible to provide some of their own supplies as part of the engineering process.

### **GeoTech: Intro to Drones, GPS & GIS**

#### *Semester Course*

This is a basic introduction course in geospatial/mapping technologies. Students will learn the fundamentals in both manual and automated flying of UAV's (Unmanned Aerial Vehicles) and how to convert the images collected into 3D environments and high-resolution mosaic sets. Students will also use Global Positioning System (GPS) units to collect and analyze data for search and rescue applications and to conduct field data collection for tree or animal surveys. Finally, students will learn the basics of using layered mapping GIS (Geographic Information Systems) to study local projects and issues like

violent crime and also take part in global humanitarian online efforts for the International Red Cross for disasters like hurricanes or earthquakes.

## **Gaming**

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

### *Semester Course*

Gaming is a hands-on elective designed to challenge both novice and computer savvy students alike. The course curriculum concentrates mainly on the development of casual games using the MIT program Scratch and Adobe's Flash. The focus will be on gaining an understanding of the various programming languages and platforms used for developing casual 2D games; the basic elements of scripted actions; Flash AS2 and AS3; file and folder management; etiquette and copyright guidelines; developing an understanding of both casual and complex gaming; and ultimately the publishing of finished games for posting on the Internet and for public play.

## **Graphics/Animation**

*Prerequisite: Students must have knowledge of basic computing skills and file management skills*

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

### *Semester Course*

In Graphics and Animation, students will develop graphics and animation using a variety of software and digital tools. Through group and independent projects students will design and edit original graphics and animation using strong design concepts learned in the course. Concepts include an understanding of composition and lighting, use of different animation techniques, optimization of a variety of image types, and the creation of 2D and 3D effects. With a focus on developing original content creations, students will use various Adobe software programs including Animate, Illustrator, Photoshop, Dimension and Premiere Pro to create projects for publication in a variety of formats including Web-based, rich media applications, video, and printed materials.

## **Graphic Design**

*Prerequisite: Intro to Art*

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

### *Semester Course*

Graphic Design is a foundation graphics course utilizing computer media with an emphasis on design elements and principles. Typography, illustration, digital imaging, and manipulation of images will be covered. In addition to technical skills, an exploration of creative thinking, problem solving, and critical

analysis will be studied. Students will be encouraged to develop an expression of individual style. In addition to technical skills, an exploration of creative thinking, problem solving, and critical analysis will be studied. Students will be encouraged to develop an expression of individual style.

May be used as a technology or art credit.

## **Graphic Design II**

*Prerequisite: Graphic Design I*

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

*Semester Course*

The core emphasis of this course covers the history of typography, an introduction to page layout design (both for print and online environments), as well as a study of influential designers. Strong emphasis is placed on the history of type and the technical, problem-solving and aesthetic use of display and text type. Through lectures, demonstrations, and studio work, students are introduced to the creative thinkers, important innovations, and breakthrough technologies that have shaped the evolution of visual communication. Creative thinking is encouraged, along with prescribed techniques and media.

May be used as a technology or art credit.

## **Computer Science - Beginning Robotics**

*Semester Course*

Students will learn the foundations of robotics and how they are used in the modern world today. Upon completion of the course, the successful student should have an understanding of robotics and engineering design and their use in everyday life, and the ability to safely apply these concepts in the laboratory.

Students may receive one half high school Technology credit for successful completion of this course.

## **Computer Science - Advanced Robotics**

*Semester Course*

Students will build upon the foundations from the Beginning Robotics class. Upon completion of the course, students will be able to design, test, and refine a number of robots and understand the use of robotics in daily life. Students will also mentor beginning robotics classes.

## **Video Production I**

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

*Semester Course*

Video Production is a project-based video curriculum that develops career and communication skills in video production using mainly Adobe tools from the Adobe Master Collection of software, including Adobe Premiere Pro and Adobe Story. The curriculum adopted for this course is published by Adobe and develops knowledge in storytelling, capturing and editing video and audio, and proper script writing format. Each project builds on lessons previously learned. This digital video curriculum aligns with the International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) for Students.

### **Video Production II**

*Prerequisite: Video Production 1*

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

*Semester Course*

Video Production II is a project-based video curriculum that builds on lessons learned in Video Productions 1. Using Adobe Master Collection software, such as Premiere Pro, students will expand shooting techniques, movie short scriptwriting, and character development. Students create a mini-series throughout the semester, developing an expression of individual style. Pre-production will be completed before shooting begins. This digital video curriculum aligns with the International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) for Students.

### **Web Design**

*Requirements: Laptop/computer compatible with Adobe Creative Suite software (iPad/Chromebooks are **not** compatible)*

*Semester Course*

The Web Design course is a hands-on elective designed to challenge both novice and Web savvy students alike. The focus will be on gaining an understanding of the various programming languages and platforms used on the Web; original content creations using various Adobe programs including Dreamweaver, Illustrator, Photoshop, XD and Animate; the basic elements of Internet protocol; Web server software; formatting of pages; file and folder management; etiquette and copyright guidelines; developing a specific purpose and goal for the site; and ultimately the publishing of Web site projects on the Internet for public view.

### **Advanced Tech**

*Prerequisite: Departmental Approval Required*

Students who sign up for this independent research class must first define a project using spatial and scientific technology and work with mentors and coordinators. Students represent the story of what they determine is important and regularly report verified findings while refining their question to remain on target in solving questions in these fields. Students will be mentored in telling their stories powerfully with media and data gathered for maximum impact from professionals in the field. Students are

encouraged to summarize their work in conference proceedings, written articles, and reports for agencies in which they become involved. At least one presentation is expected at a conference of our planning such as Bishop Dunne's GeoTech or Esri's summer educational summit or at a science or Geography Teachers conference in the fall. In preparation for such events students may be required to spend additional time outside of class to process information gathered or reports generated.

## **OTHER ELECTIVES**

### **ACT/SAT Prep**

*Semester Course (Fall only) Open to 10<sup>th</sup> – 12<sup>th</sup> Grade students*

ACT/SAT Prep is designed to prepare students for the challenges involved in the SAT, ACT, and PSAT. Students will study vocabulary, review English and math skills, and learn test-taking techniques and strategies in an effort to improve test scores. This class is Pass/Fail.

### **Animals & Humans**

*Semester Course*

In this Semester Course students will identify and explore various species of domestic animals, as well as other wildlife, with concentration on those indigenous to Texas. Students will also learn about the procedures taken by rescue groups and shelters in reference to stray animals. Students will examine basic veterinary medical procedures and legal aspects of animal cruelty with assistance from the SPCA and District Attorney's office. This course will be reinforced with participation in the Bishop Dunne St. Francis Animal Rescue Club, lab experiments, guest speakers, and a field trip. Other topics include, but are not limited to the following: agriculture, adoption and pet care, animal assisted therapy, animal behavior and training, animal systems modeling, forensics and toxicology, human-animal interaction, sustainable husbandry, and third world limited resource animal systems.

### **Sports Medicine**

Sports medicine is designed for students interested in fields such as athletic training, physical therapy, medicine fitness, physiology of exercise, kinesiology, nutrition, and other sports medicine related fields. The course includes class work and practical hands-on application in the following areas: prevention, treatment, and rehabilitation of sports injuries, taping, and wrapping injuries, first aid/CPR, emergency procedures, basic nutrition, and sports medicine careers.