BISHOP DUNNE CATHOLIC SCHOOL

12TH GRADE

Course Selection Worksheet

English

- ☐ English IV College Prep
- ☐ English IV AP English Literature

Math

- ☐ Pre-calculus College Prep
- ☐ Pre-calculus Honors
- ☐ Calculus College Prep
- ☐ Calculus AB AP
- ☐ Statistics AP

Science

- ☐ Anatomy and Physiology
- ☐ Chemistry II AP
- ☐ Biology AP
- ☐ Environmental Science AP
- ☐ Modeling Physics College Prep
- ☐ Physics I AP
- ☐ Physics II AP

Social Studies

- ☐ Economics College Prep
- ☐ Economics AP
- ☐ U.S. Government College Prep
- ☐ U.S. Government AP

Theology

- ☐ Theology IV A World Religions
- ☐ Theology IV B Social Justice

World Language

- ☐ Russian I
- ☐ Russian II
- ☐ Russian III
- ☐ Spanish I
- ☐ Spanish I Honors
- ☐ Spanish II
- ☐ Spanish II Honors
- ☐ Spanish III
- ☐ Spanish III Honors
- ☐ Spanish IV
- ☐ Spanish IV Honors
- ☐ AP Spanish Language

Electives*

- ☐ Dance
- ☐ Strength
- ☐ Yoga
- ☐ Intro Art
- ☐ Draw/Paint
- ☐ Adv Paint
- ☐ Photo I
- ☐ Photo II
- ☐ Film I
- ☐ Yearbook**
- ☐ Studio Art AP**
- ☐ Band Fund.**
- ☐ Adv Band**
- ☐ Adv Honors Band**
- ☐ Strings**
- ☐ Adv Strings**
- ☐ Peer Ministry**
- ☐ Adv Honors Strings**
- ☐ Choir
- ☐ GeoTech
- ☐ Gaming
- ☐ Graphics/Animation
- ☐ Graphic Design I
- ☐ Graphic Design II
- ☐ Robotics
- ☐ Adv Robotics
- ☐ Engineering I
- ☐ Engineering II
- ☐ Video Production I
- ☐ Video Production II
- ☐ Web Design
- ☐ Adv Tech
- ☐ Animals & Humans
- ☐ Sports Medicine**
- ☐ 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 6 credits in 12th 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 IV College Prep

A survey course presented in a historical perspective and context, British Literature begins with the Anglo-Saxon period and ends with study of post-modern texts. Students explore the evolving themes and styles of British literature as well as Britain's effects on colonial literature through the analysis of poetry, prose, and drama. Students will continue to develop critical thinking skills and improve writing skills with a variety of assignments which include the acquisition of vocabulary. Students will review grammar through application, thereby refining writing skills learned in previous courses to produce original writing that is beautiful, cohesive, and concise. Students will also develop logic in argumentative essays and review the research process in preparation for the required research paper.

Dual Credit through Dallas College available for qualifying students.

English IV AP English Literature

Prerequisite: English III or English III AP and departmental approval

While providing excellent preparation for any college English course, AP English IV more specifically prepares the student for the English Literature Advanced Placement exam by engaging in both close reading and critical analysis of world literature in fiction and poetry. Through careful study, students will consider a number of literary elements of a particular work, including, but not limited to, structure, style, imagery, and theme. Required of the student are intensive reading, writing, tutorial participation, and other studies, however, class time consists mostly of analysis and discussion. The Advanced Placement test in Literature and Composition is recommended but not required.

Dual Credit through Dallas College available for qualifying students.

MATH

Pre-Calculus College Prep

Prerequisite: Algebra II and Geometry

The Pre-Calculus course is a study of functions, which includes periodic, composite, and inverse functions, as well as polynomial, exponential, and logarithmic functions. Trigonometry is an integral part of the course. Sequences and series, matrices, and probability are studied in the fourth quarter.

Dual Credit through Dallas College available for qualifying students.

Pre-Calculus Honors

Prerequisite: Algebra II, Geometry and department approval

The Pre-Calculus Honors course is designed for the advanced mathematics student. The study of functions is extended and more attention is given to analytic geometry. Trigonometry is an integral part of this course, which will also contain material on limits and continuity.

Dual Credit through Dallas College available for qualifying students.

Statistics AP

Prerequisite: Pre-Calculus (may be concurrent) and department approval

This course covers material found in a one-semester introductory college course in statistics. Emphasis is placed on analyzing, 6 collecting, and drawing conclusions from data. Ideas and calculations presented in this course have immediate connections with real world current events. Successful completion of this course prepares students for the AP Statistics exam in May.

Calculus College Prep

Prerequisite: Pre-Calculus

Calculus covers such topics as a Pre-Calculus review, limits and continuity, derivatives, and integration. It is a transitional class between high school mathematics and the courses students will encounter in college. Students enrolled in this class are not eligible to take the AP exam in May.

Calculus (AB) AP

Prerequisite: Pre-Calculus and department approval

The AP Calculus AB course is equivalent to a college-level Calculus I course. It covers topics such as limits of a function and continuity, differential and integral calculus. Calculus concepts are applied to the physical sciences and other disciplines. Successful completion of this course prepares students for the AP Calculus AB exam in May.

SCIENCE

Physics Modeling College Prep

Prerequisite: Chemistry I, Biology I, Algebra II

In this course, students will develop mathematical models by examining the results of their laboratory experiments. The models developed will be deployed in problem solving. Group discussions will help students achieve depth of understanding. Frequent student presentations help promote understanding, organization, and communication skills. Emphasis will be on mechanics, including linear motion, force, energy, projectiles, circular motion, and interactions.

Physics 1 AP

Prerequisite: Chemistry I, Biology I, Algebra II, and department approval

Physics 1 AP is a course designed for students who wish to pursue a career in engineering, medicine, or another science. Emphasis is placed on understanding the concepts of mechanics, gravity, periodic wave motion, and heat. Laboratory work provides a “hands on” understanding of the physics phenomena studied. Coursework culminates in the AP Physics exam.

Physics 2 AP: Algebra-Based

Prerequisite: Physics 1 AP or Physics Modeling and concurrent enrollment in Pre-Calculus

Physics 2 AP is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

Biology AP

Prerequisite: Chemistry I, Biology I, Algebra II, and departmental approval

The AP Biology course is designed to be the equivalent of an introductory course taken by biology majors during their first year of college. Primary emphasis is placed on developing an understanding of the concepts of molecular biology, heredity, evolution, and populations. The course involves extensive laboratory work and preparation for the AP Biology Exam.

Chemistry II AP

Prerequisite: Algebra II, Chemistry I, concurrent enrollment in Pre-calculus and departmental approval

Chemistry II is a continuation of Chemistry I and further develops laboratory techniques, the scientific method, and the mathematical modeling of matter's behavior. The course includes molecular structure, kinetic theory, the states of matter, energy and entropy, chemical equilibrium, acid-base relationships, electrochemistry, nuclear chemistry, and organic chemistry. Coursework culminates in the AP Chemistry exam. Summer enrichment assignment required.

Environmental Science AP

Prerequisite: departmental approval and Biology I

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.

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.

SOCIAL STUDIES

U.S. Government College Prep

Semester Course

This course is an introduction to both the foundations and development of the American political system and the structure and functions of the American governmental systems at the federal, state, and local levels. Students will be expected to utilize technical, linguistic, and historical skills learned in previous years.

U.S. Government AP

Semester Course

Prerequisite: departmental approval

AP Government is an intense, one semester examination of the institutions of the American political system and their development. Students will gain an analytical perspective of the United States Government and its various institutions, groups, beliefs, and ideas. Student presentations and research involving the use of technology are an integral part of the course. A major project is required twice per semester. Emphasis is placed on the AP curriculum in preparation for the AP test in May.

Economics College Prep

Semester Course

This course is a basic introduction to economics with primary emphasis on the characteristics and working of the market system underlying American free enterprise capitalism. Consideration will be given to the three primary economic systems, to the participation of the consumer in the American economic system and to the debate over the increasing influence of government as the public sector in the American economy.

Economics AP

Semester Course

Prerequisite: departmental approval

AP Economics is an intense look at Microeconomics. Students will cover an extensive amount of material concerning economic systems and personal economics, emphasizing the American free enterprise system. The course will emphasize the nature and function of product markets and the principles of economics that apply to an economy as a whole.

THEOLOGY

Theology IV A – Ecumenical and Interreligious Issues (World Religions)

Semester Course

Ecumenical and Interreligious Issues attempts to view faith, knowledge, belief and their relation to each other, as well as God, Jesus, the Scriptures, suffering and death from the perspective of the major world religions.

Theology IV B – Living as a Disciple of Christ (Social Justice)

Semester Course

Living as a Disciple of Christ is the student's opportunity to understand and embody the role of service in their Christian life. The in- class study will focus on the Church's Principles of Catholic Social Teachings, and these principles will be put into practice twice each week through service to the Dallas community.

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 IV College Prep

Prerequisite: Spanish III or III H

Spanish IV is a total immersion Spanish course for students who wish to further develop the writing, speaking, reading, and listening skills they acquired in Spanish III. Accuracy and fluency in these four target areas will be emphasized through the study of grammar, vocabulary, and culture. This course will also prepare students for a College Placement exam in Spanish language.

Spanish IV Honors

Prerequisite: Spanish III or III H

Spanish IV is a total immersion Spanish course for students who wish to further develop the writing, speaking, reading, and listening skills they acquired in Spanish III. Accuracy and fluency in these four target areas will be emphasized through the study of grammar, vocabulary, and culture. This course will also prepare students for a College Placement exam in Spanish language. Summer enrichment assignment required.

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.

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 on 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 contest 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 10th – 12th 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.

Peer Ministry

Year Long Course

Peer Ministry is a specialized course only for rising Juniors and Seniors. The course is designed to form student ministry leaders through personal, spiritual, intellectual, and human formation. Peer Ministers get the privilege of setting up for masses and prayer services, as well as getting to lead one retreat per school year.

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.