St. Francis DeSales High School Course Selection Guide 2014-2015



ART & DESIGN

ART BASICS

• Required of all 9th or 10th graders and transfer students that have not had an introductory art course, ½ credit

Through this course, students will study and practice a selection of the "basic" principles of art and design. This study will enable future techniques and development of skills to be enhanced, therefore, allowing greater confidence and attainment in resulting work. They will be introduced to the whole process of perception of and interpretation of art. They will be able to identify with each of the 15 basics and will be able to draw, and discuss these with reference to their own work and the work of selected artists. Some of the formal elements (basics) include line, tone, perspective, balance, composition, and color. Students will be able to express their work, thoughts and feelings in both visual and written form together with verbal commentaries. Appropriate artistic vocabulary will be employed.

MULTI-CULTURAL ART

• Elective, Open to all 10th graders and 11th and 12th graders with teacher approval, 1 credit

• Prerequisite: Successful completion of Art Basics

This full year course is an exciting cultural adventure into the many colorful and creative artworks of selected countries and peoples. Students will be able to identify selected countries and cultures and the main artworks from them. They will be able to produce effective visual artworks, with reference to these cultures, while enhancing their work with their own creativity and heightened skills with media. Students will be introduced to and will be able to develop their skills, to a greater degree, with a new and wider range of techniques and media, such as printmaking, Australian Aboriginal painting, Indonesian batik (wax), and Chinese brush painting. They will also produce work in written, electronic, and verbal forms and compare how technology is used in major artwork of certain cultures. Students will build and develop a collection of multi-cultural artworks and will select specific ones to produce their own work for the exams. Students will develop a deeper and more prolific comprehension of art, artists, cultural needs and influences, artistic vocabulary, and art as a strong visual statement, on a global scale. Other selected areas of cultural influence to the visual arts, such as drama and theater, dance, music, and architecture will be included as important and relevant correspondences. Students will incorporate many aspects of a culture in their main topic work and their selected themes/topics (personal preferences) for their exams.

CONTEMPORARY ART & GRAPHIC DESIGN

- Elective, Open to 11th and 12th graders that are highly interested in the visual world, 1 credit
- Prerequisites: Successful completion of Art Basics and one other art course

This exciting excursion into the realms of vast visual imagery is a full year course. The student has the opportunity to enhance his skills, artwork, and knowledge of art through the study and practice of two interesting and appropriate fields of art and design. These two fields will go hand-in-hand in relation to the work the student will produce. The first field, and first half of the course, delves into the world of Contemporary Art: its media, techniques, artists, visual statements, creative drawings and cultural impact. Students will be able to study and train their developing work to selected areas and artworks, depending on their interests. Some selected artists included will be: Lichtenstein, Warhol, Pollock, and John Lennon. Some selected techniques, media, and topic areas will include: Pop Art, Op Art, screen-printing, tattoo design, graffiti, and video game graphics. Student artwork produced will be in visual, written, verbal, and electronic form. The second field, and second half of the course, will see the student further enhance, extend, and develop skills in the production of high quality and effective artwork. It takes the student into the commercial world of Graphic Design. Again, specific media and techniques will be visited and experienced, leading to the production and development of the student's own portfolio. This will be a collection of work geared to the student's own interests and strengths in art and design. Some topic areas will include: poster design, illustration, video game graphics, and vehicle design. The student is expected to have a good grounding in art and a genuine interest in developing artistic vocabulary and bold, personal visual statements.

ART IN ADS, SPORTS, ET AL!

- Elective, Open to 10th, 11th, 12th graders who are interested in taking an intermediate art course and developing their skills to a higher level. Also, students interested in advertising, sports, and the variety of exciting contemporary art forms, 1 credit
- Prerequisite: Successful completion of Art Basics with teacher approval

This course will be an exciting exploration of the variety of different art forms in the modern, contemporary world. From art in advertising, art in sport, art in entertainment, art in your own world, to art in the realms of fantasy, science-fiction and even body art, you will be able to explore and develop your art work in many exciting visual ways. Art is "out there" in so many forms and you will work through some key areas of contemporary art, linking the history to modern ways of thinking, and visualizing, before developing some selecting some specific areas which hold a relevant place in your personal interests.

A desire to explore, expand skills in media and techniques, determination to develop personal interests in visual form (to a high standard) and a genuine interest in creating exciting art works are all valuable ingredients for this course.

Bring your interests and ideas - which we can work on and incorporate into the course - and we can really cook-up a creative combo!

SENIOR ART PORTFOLIO

- Elective, Open to 12th graders with teacher recommendation who seriously wish to continue their exploration of art and design and who wish to develop and prepare a portfolio for college interview and acceptance, 1 credit
- Prerequisite: Any senior opting for this class must have taken at least two art courses and must be a serious art student

This course affords the serious art student the opportunity to delve further into the exciting exploration of art and design. New techniques and media combined with a more personal and relevant student approach will encourage the development of an exciting and creative portfolio. The course also gives the student the opportunity

to develop and prepare a concise and appropriate high quality collection of work, in lieu of college interviews and acceptance. The student, who opts for this course, must be ready to work to high standards and requirements (as denoted by established art colleges). The student will enhance existing skills in the use and application of selected media and techniques, and will introduce more of their own creative flair to their high-quality finished visual work.

BUSINESS & TECHNOLOGY

PRACTICAL TECHNOLOGY APPLICATIONS

• Required of all 9^{th} or 10^{th} graders and transfer students that have not had a technology course, $\frac{1}{2}$ credit

This course prepares students to effectively utilize their iPad and a variety of Apps as a learning resource. Topics covered within the course include the history of technology and the computer, how computers work, internet safety, networking, cloud computing, citing electronic sources, Resumes, Formal Letters, Malware, and utilization of the iLife App Suite for a variety of learning activities. As time allows, other Apps, cloud based programs, and topics will be introduced.

INTERACTIVE MEDIA AND BROADCASTING

- Elective, Open to 11th and 12th graders, 1 credit
- Prerequisite: Technology Teacher approval! Successful completion of Practical Technology Applications <u>AND</u> submission of a multimedia project (see teacher for details must be submitted by May 1, 2014)

This course is designed for the serious technology student. Students will utilize a variety of software and hardware in the MAC Media Lab to develop interactive media products —including a weekly school broadcast. Students will be introduced to a number of technical and non-technical skills, including broadcast format writing, interviewing, directing, and hands-on camera and studio skills including lighting, green screen, sound, and editing. This course will also examine the history of broadcast, today's trends, legality issues, and design theory. Students in this course will be required to devote a significant amount of outside class time in order to plan and record media content as well as produce a major multimedia project.

MAC MEDIA LAB STUDENT AIDE

- Elective, open to select 12th grade STLP members, 1 credit
- Prerequisite: Successful completion of advanced technology course and member of the DeSales STLP with teacher approval.

Students will gain valuable technology and business related experience during their involvement as a Mac Media Lab Student Aide. Student Aides will demonstrate and provide direction/support in the usage of Lab equipment to teachers and students. Aides will also maintain the Lab Schedule Log and assist teachers and individual students with reserving the Lab. Aides will also collaborate with the Curriculum Media Specialist and other teachers in order to incorporate Lab technology into the curriculum. Aides will also complete other related tasks, such as making copies, providing assistance to teachers and students at the iHelp Desk with the utilization of iPads, assisting the IT Department, etc. Student aides must have a working knowledge of the hardware and software utilized in the Lab. Aides must also be comfortable with providing instruction/assistance to teachers and students while maintaining a professional and courteous demeanor.

PERSONAL FINANCE & BUSINESS MANAGEMENT

• Elective, Open to 11th and 12th graders and 10th graders with teacher approval, 1 credit

This course is an introduction to planning and implementing a personal money management budget strategy. Topics include the associated cost to attend college, personal loans, credit and debit cards, acquiring insurance for yourself, car and home/apartment, managing a savings and checking account, understanding your pay check and the associated payroll deductions, planning for retirement, business ethics and developing effective leadership and management skills. Each lesson is designed to be a practical approach toward ensuring the financial success of each student.

PUBLIC SPEAKING

• Elective, Open to 10th and 11th graders and 12th graders with teacher approval, 1 credit

This course is designed to develop verbal communication skills. Students are introduced to proven methodologies and techniques, which will enhance their ability to effectively respond or convey information and/or ideas to an audience or in a one-on-one scenario, such as a college or business interview. Topics include developing a properly formatted speech, listening effectively, organizing communication ideas, motivating/persuading an audience, requirements for a successful job interview, and a one-minute commercial. Collectively, the students work together as a team to provide constructive input and suggestions, which improves the capabilities of each member of the class.

BUSINESS WRITING

• Elective, Open to 11th and 12th graders, 10th graders with teacher approval, 1 credit

This course is designed to develop an individual's critical business writing communication skillsets. Students are introduced to various examples of business documentation, which will assess their ability to effectively analyze all the elements of a writing task in order to select the most appropriate response; form, style, document design, and graphical elements. Throughout the course of the school year, students will be required to research, read, and comprehend business and technical data from books, the internet, and periodicals. This information will be disseminated via reports, primarily in a written format. However, periodical oral presentations will complement these reports as required. Assignments and course work will be submitted electronically which requires the student to develop an acute understanding of Microsoft Outlook, Moodle, and navigating the World Wide Web.

ENTREPRENEURIAL STUDIES

- Elective, Open to 10th, 11th, and 12th graders, 1 credit
- Prerequisites: Successful completion of Algebra I

This course will offer students an opportunity to explore the ins and outs of owning their own business. Students will have an opportunity to develop their own business ideas and work out everything from the set-up and maintenance to the taxes associated with it. Assessments would include homework, quizzes, tests, and projects with a focus on creativity and application of concepts presented.

LEADER NEXT – EFFECTIVE SKILLS

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This course will explore the traits and characteristics needed to be a good leader through the use of modern movie clips and other mediums. Students will add new leadership skills to their "toolbox" and discover unused tools they already possess. In combination with leadership skills, this course is designed to help students claim their self-esteem, identify their individual talents, assume responsibility for themselves, and interact responsibly with others.

JUNIOR SEMINAR

• Elective, Recommended for 11th graders taking at least one AP or Dual Credit Class and / or enrolled in honors courses, 1 credit

This course will focus on post-secondary preparation through ACT/SAT test strategies, essay and resume writing, and projects relating to current events. Students will also work on college essay writing, scholarship searches, writing styles and formats (MLA v. APA), and more.

SENIOR SEMINAR - New!

• Elective, Open to 12th graders taking at least one AP or Dual Credit Class and/or enrolled in honors courses, 1 credit

This course will focus on post-secondary preparation through ACT/SAT test strategies, discernment and application of/for post-secondary education, scholarships, and grants. Time will also be spent on resume writing, college essay writing, and more.

ENGLISH

ENGLISH I

• English option for 9th graders, 1 credit

In English I, students will begin their development as readers and writers at the high school level. Course content will range across genres: novels, short stories, plays, essays, articles and poetry. No borders are drawn between American, British and World literature; all types of literature, from all sources, are examined. As writers, English I students will acquire a clear and reliable writing process that they can apply to the varied demands of explanation, persuasion and creative expression. English I will equip the students for high school and beyond with sharp fundamental skills in discovering, interpreting and creating meaning with the English language.

ENGLISH I HONORS

• English option for 9th graders, 1 credit

Placement in English I Honors identifies the student as a reader and writer who is already successful in the fundamentals and is ready to go "above and beyond." Honors students aim for the same goals as all English students; but the more rapid pace of instruction allows Honors students to cover more material, or to cover some material in greater depth. On equivalent assignments, an Honors student will be held to a higher standard in the assignment of a grade or in proving that they have "satisfactorily" completed a piece of work. Honors students are expected to be AP English students as seniors—and to strive accordingly.

ENGLISH II

• English option for 10th graders, 1 credit

Prerequisite: Successful completion of English I at any level

By their sophomore year, Colt English students are adept at all the activities vital to a rich and empowering study of the English language tradition described above. In English II, they continue to practice those skills and refine their abilities by applying them to new and more challenging tasks as readers and writers. English II students will deepen their knowledge by focusing on American literature. At this stage, the cultural and historical context of each work takes on added emphasis, encouraging Colt English students to fine-tune the critical thinking skills of analysis, evaluation and synthesis of content and ideas.

ENGLISH II HONORS

• Required English option for 10th graders, 1 credit

Prerequisite: Successful completion of English I at any level

This course shares the American Literature focus of English II. As in the Honors section of English I, Colts in English II Honors are expected not just to meet the course standards, but to constantly extend their own individual standards. Pace, workload and assessment expectations are all enhanced in anticipation of these students' progression into AP English as seniors.

ENGLISH III

• English option for 11th graders, 1 credit

• Prerequisite: Successful completion of English II at any level

By the junior year, Colt English students have become masters of clear and effective writing and speaking, incisive and thorough critical thinking, and they have acquired a solid base of knowledge in literature and facility with the methods of its interpretation. In English III, they will apply all these skills—and the confidence of their prior successes— British Literature from before the Middle Ages through contemporary times.

ENGLISH III HONORS

- English option for 11th graders, 1 credit
- Prerequisite: Successful completion of English II at any level

As with previous honors level English courses, English III Honors "raises the bar," and guides students in raising the bar for themselves. While joining their fellow juniors in the study of British Literature, English III Honors Colts will receive a preliminary infusion of AP English activities and standards in a course that mimics a college-level lit and composition class.

ENGLISH IV

- English option for 12th graders, 1 credit
- Prerequisite: Successful completion of English III at any level

As seniors, Colt English students turn studies to World Literature—from classics of ancient mythology and the oral epic traditions, to modern milestones from around the world (in English translation). While continuing to practice critical reading and clear, effective and expressive writing and speaking in many contexts, the students will be posed a series of transactive, or "real world," writing problems. These include: the composition of resumes, effective business letters and proposals, or persuasive essays in practical settings—all vital tools, whatever their post-secondary futures hold.

ENGLISH IV HONORS

• English option for 12th graders, 1 credit

• Prerequisite: Successful completion of English III at any level

As with the other Honors level English courses, English IV Honors has a very high expectation set for students. The class is geared towards World Literature and covers novels, poetry, composition and rhetorical skills in a comprehensive manner. Honors English IV is a great option for students who do not wish to take AP Literature and Composition for college credit but are still looking to take their English education to new heights.

ENGLISH IV, ADVANCED PLACEMENT

- English option for 12th graders, 1 credit
- Prerequisites: Successful completion of English III Honors with teacher recommendation

AP English is a college-level literature and composition course, full stop. Its rigorous regime of interpretive reading and expert composition prepares these senior Colts for success on the College Board's AP English Examination in the spring — which could potentially earn the students transferable college credit in English. Practice on mock-AP Exam tasks will be a staple of the class work. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

HEALTH & WELLNESS

HEALTH & PHYSICAL EDUCATION

• Required of all 9th graders and transfer students lacking a Health and PE course, 1 credit

This course is designed for the student to develop skills for wellness in order to live longer and have a high quality of life. Students must understand health as an equal state of physical, mental and social well-being. Students are expected to work hard on improving all three aspects of health and not just one or two in order to achieve the goal of wellness. The purpose of the physical education component of the course is to make a lasting difference in the physical, mental and social wellbeing of students. Therefore students learn to use their decision—making process to make informed choices regarding lifetime physical activities that meet their personal needs. Through exercise and activity, students develop efficient movement patterns and learn concepts of body awareness, space and effort. The development of body systems that operate efficiently and the application of interpersonal skills to solve problems provide the basis for students to become capable, fit adults. This is a low competitive course stressing participation and not competition.

ADVANCED PHYSICAL FITNESS

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This course is designed to enhance cardiovascular/respiratory endurance, stamina, strength, power, speed, flexibility, agility, accuracy, balance, and coordination. Its scope will cover 8 different sports and should emphasize the importance of exercise while creating a healthier lifestyle. Athletic participation is required from every student. Each semester will begin with a one month in-class research project, followed by team and individual competition.

MATHEMATICS

PRE-ALGEBRA

• Math option for 9th graders, 1 credit

This year long course prepares students to enter the study of Algebra I, who have not yet been exposed to or mastered the foundational content necessary for success in the study of algebra. Students will become familiar with the following: order of operations; fractions; exponents; adding, subtracting, multiplying, and dividing rational numbers and integers; solving inequalities; roots and powers, basic equations, etc.

ALGEBRA I

• Math option for 9th graders, 1 credit

This year long course is designed to expose the student to algebraic concepts. Critical thinking skills, accuracy of computations, and work ethic are stressed in this course. This course lays the groundwork for future mathematics courses during high school. Among other concepts, students will simplify algebraic expressions, solve, write and graph linear equations, and utilize quadratic models. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

GEOMETRY

• Math option for 10th graders, 1 credit

• Prerequisites: Algebra I

This year long course emphasizes Euclidian geometry concepts with an emphasis on problem-solving and real-world applications. Engaging group work and hands-on activities help bring meaning to the geometry concepts. Among other concepts, students will solve right triangles and calculate the perimeter and area polygons and circles. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

GEOMETRY HONORS

• Math option for 10th graders, 1 credit

• Prerequisites: Algebra I Honors or Algebra I and teacher recommendation

This year long course emphasizes Euclidean geometry concepts with an emphasis on problem solving and real-world applications. The course will move at a pace and cover topics in depth consistent with college level expectation and prerequisite material for the AP (AB) Calculus course, with more extensive attention given to the sections on Trigonometry and Characteristics of the Circle. Among other concepts, students will prove basic theorems, use basic trigonometric ratios to solve right triangles and calculate the surface area and volume of three dimensional containers. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

INTEGRATED MATH III

• Math option for 11th graders, 1 credit

• Prerequisites: Integrated Math II

In the third year of the integrated mathematics program, this course continues to spiral the concepts of arithmetic, statistics, algebra, and geometry. Among other concepts, students will solve equations and systems of equations, use the Pythagorean Theorem to solve right triangles, and work with matrices. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

ALGEBRA II

• Math option for 9th (Class of 2016 and after) and 11th graders, 1 credit

• Prerequisites: 9th graders require an acceptable score on the DeSales Math Placement Test and 11th graders require successful completion of Algebra I and Geometry This year long class emphasizes advanced algebraic topics and concepts. Problem-solving and critical thinking skills are emphasized throughout the year. Topics of study include solving systems of equations, properties of functions, matrices, complex numbers, and graphical approaches to algebraic concepts. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

ALGEBRA II HONORS

- Math option for 9th (Class of 2016 and after), 10th and 11th graders, 1 credit
- Prerequisites: 9th graders require an acceptable score on the DeSales Math Placement Test, 10th graders must take concurrently with Geometry Honors if the course was not successfully completed in the 9th grade, and 11th graders require successful completion of Algebra I and Geometry with teacher approval

This year long course is designed to emulate the pace and rigor of a college algebra course. Topics of study are consistent with those of the regular Algebra II course with the exception of greater emphasis and depth to Exponential, Logarithmic, Conic and Trigonometric Functions, consistent with the prerequisite expectation of the AP or Dual Credit Calculus course. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

PRE-CALCULUS HONORS

- Math option for 11th graders with teacher recommendation, 1 credit
- Prerequisites: Geometry Honors and Algebra II Honors

The Honors Pre-Calculus year long course is a content driven, fast-paced approach to the study of Functions and Trigonometry. The student will be asked to think...then to approach the mathematics analytically. This is a rigorous mathematics course. The successful Honors Pre-Calculus Student will be ready for AP (AB) Calculus the following year. Among other concepts, students will solve logarithmic and trigonometric equations and sketch the graphs of rational functions. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

APPLIED MATHEMATICS

- Math option for 12th graders, 1 credit
- Prerequisites: Integrated Math III or Algebra II

The first semester of this course continues to spiral the concepts of arithmetic, statistics, algebra, and geometry with a focus on ACT specific test strategies. The second semester of the course will integrate several units of business math which will include budgeting, loan repayment, and banking. Placement in this course is determined by previous mathematic success and teacher recommendation. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

STATISTICS - New!

- Math option for 12th graders, 1 credit
- Prerequisites: Successful completion of Algebra II

This year long course emphasizes the basic concepts of statistical data and probability theory. Students will summarize, represent, and interpret data, make inferences and justify conclusions from sample surveys, and use probability to evaluate event outcomes. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

PRE-CALCULUS

- Math option for 12th graders and 11th graders with teacher recommendation, 1 credit
- Prerequisites: Geometry and Algebra II

The Pre-Calculus course is a year-long study of mathematical concepts such as functions and trigonometry. Real world applications and critical thinking skills are emphasized. This course will help students gain the base they need to be successful in college-level mathematics. Among other concepts, students will solve logarithmic and trigonometric equations and sketch the graphs of rational functions. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

CALCULUS, DUAL CREDIT

- Math options for 12th graders, 1 credit
- Prerequisites: Pre-Calculus Honors with teacher recommendation

This dual credit math course offers students the opportunity to earn high school credit, while earning FOUR college credit hours* through Spalding University. The course is the first college math course for the well-prepared student and integrates analytic geometry and calculus of single-variable function. Among other concepts, students will use derivatives to solve related rate and optimization problems, and understand the relationship between anti-derivatives and the area under a curve. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series.

* Students must register and pay \$100 per credit hour to Spalding and earn a grade of a "C" or better in this course to receive credit through the institution.

CALCULUS AB, ADVANCED PLACEMENT

- Math option for 12th graders, 1 credit
- Prerequisites: Pre-Calculus Honors with teacher recommendation

Calculus AB, Advanced Placement is a year-long rigorous, homework driven, algebra intensive mathematics course. The intent of the course is to prepare students to be successful in college level mathematics courses and to earn college credit for the class by taking the AP exam in May. The course is fast-paced and content driven. Among other concepts, students will use derivatives to solve related rate and optimization problems, and understand the relationship between anti-derivatives and the area under a curve. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

STATISTICS, DUAL CREDIT

- Math option for 12th graders, but may be taken as an elective in the 11th grade with teacher recommendation, 1 credit
- Prerequisites: Successful completion of Algebra II Honors

This dual credit math course offers students the opportunity to earn high school credit, while earning THREE college credit hours* through Spalding University. The course focuses on concepts and terms related to applied statistical techniques and developing skills in statistical literacy and statistical problem-solving, including hypothesis testing. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series. * Students must register and pay \$100 per credit hour to Spalding and earn a grade of a "C" or better in this course to receive credit through the institution.

STATISTICS, ADVANCED PLACEMENT

- Math option for 12th graders, but may be taken as an elective in the 11th grade with teacher recommendation, 1 credit
- Prerequisites: Successful completion of Algebra II Honors

This year long class will follow the College Board outline for AP Statistics and will include topics of study such as exploring data, planning a study, and statistical inference. Emphasis will be on critical thinking skills, problem-solving and accuracy of work. A graphing calculator is required for this class. The preferred calculator is the TI-84 Plus or any in the TI-84 series. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

SCIENCE

BIOLOGY

• Science option for all 9th graders, 1 credit

This year long course will include a study of the characteristics of living organisms, the diversity of life, biological evolution, population and community biology, as well as conservation issues confronting the earth's biodiversity in the modern world.

BIOLOGY HONORS

• Science option for 9th graders, 1 credit

Students who are interested in a career in the life sciences, and who plan on enrolling in AP Biology in their Junior or Senior year are encouraged to take this advanced level Biology course. Students will explore the same concepts as in Biology; however, the course will explore those concepts in much greater detail and depth.

BIOLOGY, ADVANCED PLACEMENT

• Elective, Open to 11^{th} and 12^{th} graders with teacher recommendation, 1 credit

• Prerequisites: Students must have successfully completed Biology, Chemistry, and are encouraged to have taken several electives in the life sciences

This course has been designed to immerse the prepared student into a concentrated form of science reasoning, much more so than the prerequisite high school Biology class. The course is considered to be college level and will emphasize on detail and inquiry. The class will cover the following topics in depth: Molecules and Cells, Heredity and Evolution, Organisms and Populations. The work load and expectations will be that of a college course. Due to the required content of this class, the student will amass a large amount of detail concerning various terminology, processes, and theory. As such, informal and formal assessments will be cumulative in nature and very frequent. It is imperative that a minimum of one hour of nightly study be devoted to this course. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

CHEMISTRY

• Science option for 10th or 11th graders, 1 credit

This year long course is a comprehensive overview of chemistry. Theory, lab work, and relevant applications to real world situations comprise the majority of the course experience.

CONCEPTUAL CHEMISTRY - New!

• Science option for 10th or 11th graders with teacher recommendation, 1 credit

This year long course examines the relevant and real world applications of modern chemistry. Teacher recommendation is required to enroll in this course.

CHEMISTRY HONORS

• Science option for 10th graders with teacher recommendation, 1 credit

This course is for the college-bound student and is a rigorous study of chemical principles. Atomic structure, the periodic table, chemical bonding, chemical equations, stoichiometry, the gas laws, solutions and reaction processes are some specific areas of study. The approach is both mathematical as well as conceptual. Lab skills will be developed to reinforce the understanding of chemical concepts and principles.

CHEMISTRY, ADVANCED PLACEMENT

- Elective, Open to 11th and 12th graders with teacher recommendation, 1 credit
- Prerequisites: Successful completion of Biology and Chemistry Honors

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. For some students, this course enables them to undertake, in their first year, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. For other students, the AP Chemistry course fulfills the laboratory science requirement and frees time for other courses. AP Chemistry

meets the objectives of a good college general chemistry course. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

PHYSICS

• Science option for 11th or 12th graders, 1 credit

• Prerequisites: Successful completion of Chemistry and minimum concurrent enrollment in Algebra II

This course will survey fundamental principles in the physical sciences; including gravity, forces and motion, electromagnetism, and the nuclear forces. The course is intended for students to explore their cosmos for a greater understanding of the fundamental forces of nature, and how those forces interact with matter to produce the phenomena of nature.

CONCEPTUAL PHYSICS – New!

- Science option for 11th or 12th graders, 1 credit
- Prerequisites: Successful completion of Chemistry and completion of Algebra I

This course will survey fundamental principles in the physical sciences including gravity, forces and motion, electromagnetism, and the nuclear forces. The course encourages students to explore their cosmos for a greater understanding of the fundamental forces of nature, and how those forces interact with matter to produce the phenomena of nature. This course emphasizes the development of the understanding of the basic principles of physics using art, writing, laboratory projects, and a less rigorous mathematical approach.

PHYSICS 1, ADVANCED PLACEMENT - New!

- Science option for 11th graders with teacher recommendation (AP Physics 1 replaces Honors Physics), 1 credit
- Prerequisites: Successful completion of Chemistry and minimum concurrent enrollment in Pre-Calculus

This course is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. Students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. This course provides a rigorous mathematical approach to physics.

PHYSICS 2, ADVANCED PLACEMENT - New!

- Science option for 12th graders with teacher recommendation, 1 credit
- Prerequisites: Successful completion of Physics and teacher approval

This course will help the student develop a deeper understanding of the foundational principles of physics in classical mechanics and modern physics. Students will apply these principles to complex physical situations that combine multiple aspects of physics. Students will discuss, confer, and debate with classmates to explain a physical phenomenon investigated in class and design and conduct inquiry-based labs to solve problems.

ANATOMY & PHYSIOLOGY

- Elective, Open to 10th, 11th, and 12th graders, 1 credit
- Prerequisite: Successful completion of a Biology course at any level and Health

The course is for the serious student and involves an intense and detailed look at the structure and function of the human body. Students will be immersed in much more foundational specifics regarding the structures, organs, and processes than in the prerequisite Biology and Health courses. In addition to the foundational detail, the course will explore the diseases of the body, modern medical practices, and the continual struggle of the body to heal itself. Students in this course will be provided the opportunity to complete several dissections and other lab activities.

FORENSIC SCIENCE

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

• Prerequisites: Successful completion of a Biology course at any level

Forensic science has shaped the world of justice, fueling crime investigations and signifying the progress of modern technology. Forensic science of today covers topics such as: Modern computer/clay facial reconstruction; DNA fingerprinting; autopsy techniques; forensic anthropology; toxicology; and much more. The students in this course are taught the fundamentals of a criminal investigation and how it is applied in a court of law. They learn by doing; they process crime scenes, analyze lab data, conduct scientific investigations, explore the internet and become familiar with various texts. Students use technology to participate in activities that closely resemble those used by forensic scientists. Students will also have the opportunity to focus on the mind of the criminal, rather than the crime itself. Many different aspects of the criminal are studied including: criminal brain v. non-criminal brain, modus operandi, staging, signature, profiling and interrogation techniques. Serial killers, arsonists, gang members, burglars/robbers, and terrorists will be studied.

SPORTS MEDICINE

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

• Prerequisites: Successful completion of a Biology course at any level

This course will introduce students to the exciting field of sports medicine. The major areas of study will be athletic injury prevention and care, sports performance training, as well as research methods and exploring the different professions in the field of sports medicine. Students will be taking a detailed look at the area of exercise and athletics from a physiological stand point and will learn how the various biological systems are affected by exercise. Students will also become well-versed in the area of performance training for athletics. The class participants will learn to develop and critique various training methods based upon the physiological adaptations that happen to the body during performance training. Students participating in the course will be eligible to work with all of the different athletic teams while acquiring service hours when volunteering at community events.

ENGINEERING

• Elective, Open to 11th and 12th graders, 1 credit

• Prerequisite: Successful completion of Algebra II and at least concurrent enrollment in Physics

This course will provide students with a solid introduction to the study of engineering. Many different engineering disciplines will be explored, and students will be exposed to the process of engineering problem solving. Much of the course will be project-oriented, with students working in groups on various engineering-type problems. Presentation of results will be a point of emphasis in the course as well.

SOCIAL STUDIES

WORLD HISTORY & GEOGRAPHY I

• Social Studies option for 9th graders, 1 credit

This course is designed to focus on the common themes that recur across time and place, and eight historical eras to be studied in chronological order. Students explore what is happening in various global regions and civilizations at a given time and investigate issues from multiple perspectives. Over the two years, events and themes of the non-western world (including Africa, China, Japan, India, the Middle East, and South America) are studied. The first year core curriculum extends from the ancient world to the modern world. Focus will be placed on world geography, document and thematic based essays, and note-taking skills.

HUMAN GEOGRAPHY, ADVANCED PLACEMENT - New!

• Social Studies option for 9th graders, 1 credit

This course is designed to represent a systematic study of the earth and its inhabitants. The College Board endorsed course includes how to think geographically utilizing maps, population issues, cultural patterns, political organization of space, agricultural and rural land use, industrialization and economic development, and cities and urban land use. Students will explore why places and things are what they are; what their location means in the past, present, and future, and how their location affects other places. Ultimately, the course should help the student answer questions about how you relate geographically to the places you inhabit, and how you relate to our world of diverse places. An additional fee is associated with this AP course to cover the cost of the AP exam at the end of the year, should the freshman decide to take the exam. The decision to test or not will be made mid-year.

WORLD HISTORY & GEOGRAPHY II

• Social Studies option for 10th graders, 1 credit

The course is designed to continue the focus on the five social studies standards, common themes that recur across time and place, and eight historical eras to be studied in chronological order. Students explore what is happening in various global regions and civilizations at a given time and investigate issues from multiple perspectives. The core curriculum extends from ancient Greece to modern times with the primary focus on the western world. Emphasis will be placed on Document Based Essay (DBQ) writing and critical thinking skills.

EUROPEAN HISTORY, ADVANCED PLACEMENT

• Social Studies option for 10th graders with teacher approval, 1 credit

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop an understanding of some of the principal themes in modern European History; an ability to analyze historical evidence and historical interpretation; and an ability to express historical understanding in writing. Students in this course are expected to demonstrate knowledge of basic chronology and major events and trends from the High Renaissance of approximately 1450 to the present. The broad themes of intellectual-cultural, political-diplomatic, and social-economic history form the basis of the course within that chronology. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

US HISTORY SURVEY

• Social Studies option for 11th graders, 1 credit

This course involves an in-depth history of the United States from the Spanish-American war era to the present day. Special emphasis is placed on the growth of America as a world power. Political, social, diplomatic and military issues will be examined. Particular emphasis will be placed on the history of the United States after World War II. Attention will be paid to the five strands of social studies education: culture, geography, economics, civics and government, and history.

US HISTORY, ADVANCED PLACEMENT

• Social Studies option for 11th graders with teacher recommendation, 1 credit

This year long survey course involves an in-depth study of United States from founding to the present day. The course follows the rigorous and ambitious outline established by the College Board. Students will prepare for the AP exam to be given in May. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

GOVERNMENT & ECONOMICS

• Social Studies option for 12th graders, 1 credit

This year long class concerns the make up and workings of the government of the United States. Areas of study include relevant Supreme Court rulings, political parties, the Constitution, federal agencies, and current political issues facing the United States government. The economics portion of the course addresses topics such as economic systems, scarcity and factors of production, micro and macro economic principles and personal finance issues.

GOVERNMENT, ADVANCED PLACEMENT

• Social Studies option for 12th graders with teacher recommendation, 1 credit

This year long course follows the College Board curriculum suggestions and expects students to maintain a high level of individual learning. Comprehensive analysis and synthesis of information is required of all students in this course. Taking this course in the junior year may open other opportunities for students during their senior year of study. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

PSYCHOLOGY

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

The course is intended to provide students with the background necessary to explore human behavior from a more scientific perspective. Emphasis is placed upon the scientific approach to the study of Psychology, particularly the biology and chemistry involved in all human behavior. The class will take a deep look into the founders of psychology and the schools of psychology. The physiological side of psychology will also be studied, including parts of the nervous system and individual neuron communication. Learning and memory, personality traits, theories of emotion, and intelligence will all be covered in this course. This class will complete a psychological experiment and compile all data and learn the APA writing format. Students who successfully complete this course will be well equipped to handle introductory Psychology courses at the college level.

PSYCHOLOGY, DUAL CREDIT

• Elective, Open to 11th and 12th graders, 1 credit

This dual credit social science course offers students the opportunity to earn high school credit, while earning THREE college credit hours* through Spalding University. The Dual Credit Psychology class uses the newest Myers text available. The book is set-up in a Modules format and the course requires significant out of class reading. This brings specific focus on the following areas: An introduction to the science of behavior and mental life, ranging from biological foundations to social and cultural influences on behavior (and including all of the subjects scientific contributions). Moodle forums, videos and class exercises provide hands-on experience. The Course grade is heavily impacted by daily quiz grades, sixteen Unit Test, and the Mid-Term and Final Exams.

* Students must register and pay \$100 per credit hour to Spalding and earn a grade of a "C" or better in this course to receive credit through the institution.

GLOBAL ISSUES

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This course will take a year-long look at the major issues our world faces in the 21st century. Students will study specific regions with problems unfamiliar to the United States, while also examining how different cultures around the world are interconnected through religion, economics, government, and common interests. The class will focus on development and poverty, struggle from oppression, conflict and diversity, and health and environment. Special emphasis will be given to current events using different types of media.

TWENTIETH CENTURY HISTORY

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This course will use a Thematic Approach to events of the Twentieth Century. Among the topics to be covered are Genocide, Human and Civil Rights, Inventions and Technology, Arts and Entertainment, the Cold war and the Breakup of the Soviet Union.

AMERICA'S WARS

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This elective course will allow students to delve into America's history by examining the role that the United States has played in different wars over the course of our country's history. This course will go beyond content that is covered in a survey course and give students a new perspective of the building blocks that have shaped the freedoms and cultures of the United States through reading, research, and written assessments.

AMERICAN BIOGRAPHIES

• Elective, Open to 10th, 11th, and 12th graders, 1 credit

This elective course will look at the lives of famous Americans, the times in which they lived, and the skills of their biographers. People covered will range from political figures, scientists, pop culture, sports figures, or military leaders. Students will be required to complete reading of multiple biographies as well as completing book reviews on the topics covered. Summer reading will be required.

THEOLOGY

THEOLOGY I

REVELATION OF CHRIST IN SCRIPTURE

• Required of all 9th graders in the fall semester, ¹/₂ credit

Through research, reading, activities, discussions, and other forms of learning, students will investigate how God is revealed through Jesus Christ in Scripture.

WHO IS JESUS CHRIST?

• Required of all 9th graders in the spring semester, ¹/₂ credit

This course will introduce students to the mystery of Jesus Christ. They will gain an understanding of Jesus Christ as the ultimate Revelation from God to us and who Jesus is calling them to be.

THEOLOGY II

THE MISSION OF CHRIST

- Required of all 10th graders in the fall semester, ¹/₂ credit
- This course examines the doctrine of redemption, tracing God's plan from the time of Adam and Eve through the Paschal Mystery.

THE MISSION OF CHRIST IN THE CHURCH

• Required of all 10th graders in the spring semester, ¹/₂ credit

In this course, students will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by him through the Holy Spirit. The students will study the images, models, and marks of the Church in order to appreciate its both divine and human elements.

THEOLOGY III

MORALITY: LIFE IN JESUS CHRIST

• Required of all 11th graders in the fall semester, ½ credit

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students will learn the moral concepts and precepts that govern the lives of Christ's disciples and apply these principles to relevant cases.

LIVING AS A DISCIPLE OF CHRIST: SOCIAL JUSTICE

• Required of all 11th graders in the spring semester, ¹/₂ credit

The basic principles of Catholic social teachings and case studies involving each principle are the bases of this course. Students will evaluate the conditions of poverty, racism, the environment, and other social teachings in light of Church teachings.

THEOLOGY IV

SACRAMENTS AS PRIVILEGED ENCOUNTERS WITH JESUS CHRIST

• Required of all 12th graders in the fall semester, ¹/₂ credit

This course is an exploration of the sacramental nature of Church and the seven main sacraments through which, by God's grace and the work of the Holy Spirit, we encounter the living Christ.

HISTORY OF THE CATHOLIC CHURCH

• Required of all 12th graders in the spring semester, 1/2 credit

This course is a survey of the Church's history from apostolic times to the present, with the greatest emphasis on notable characters, such as the saints, and pivotal events, such as the Reformation. Students will explore the fact that the Church was founded by Christ and is sustained by him throughout history through the Holy Spirit.

SENIOR PROJECT - New!

• Option for 12th graders

This course is for seniors interested in a personalized, creative service learning experience utilizing interdisciplinary skills and knowledge while investigating an area of personal interest. Discover how your skills and knowledge connect in a meaningful way to the outside world. Students will be required to keep a portfolio of their work as they develop a product, event, or system improvement based on research, mentors, and creativity.

WORLD LANGUAGE

SPANISH IA

• Language option for 9th and 10th grade students, 1 credit

Spanish I A is a full year course designed to teach beginning grammar and basic vocabulary, with an emphasis on meaningful communication. There is also a cultural component which exposes students to the geography and cultures of the Spanish-speaking world. This component is increasingly important as we integrate more activities with an international focus into the curriculum. Students who feel they may struggle with a language are encouraged to take Spanish I A first and continue with Spanish I B the next year. After completing both courses, students will be ready to begin Spanish II.

SPANISH IB

• Language option for 10th and 11th grade students, 1 credit

• Prerequisite: Successful completion of Spanish IA

This course is the companion (second) course of the first year Spanish language program. It continues to build on the essential skills of reading, writing, listening and speaking. The students strengthen their vocabulary acquisition and grammar use of Spanish incorporating the Hispanic cultures of Mexico, Argentina, Dominican Republic, Florida and Peru. The text is rich in cultural material and themes include foods, physical and mental health, shopping, holidays and airport and travel. There are many opportunities to practice all four language skills through varied individual, paired and cooperative activities. Additional technology resources give the student a solid base of Spanish to continue their studies.

SPANISH I

\bullet Language option for 9th and 10th grade students, 1 credit

The full year course follows a logical progression from introductory vocabulary and structure to more complex uses of the language. The course includes pronunciation exercises, numerous opportunities to personalize the language to communicate orally and in writing about ones' self, family, home, school, leisure activities, and likes and dislikes. Simultaneous development of an awareness of the culture in which the language is spoken is presented in contextual themes throughout the course.

SPANISH II

• Language option for all students, 1 credit

• Prerequisite: Successful completion of Spanish I or IB

The full year course moves students to greater communication skills in Spanish. The student will read short narratives and articles from newspapers and magazines, practice oral and aural skills in a variety of formats, increase critical vocabulary and learn the simple past tenses, and the future and conditional tenses. There are numerous guided writing activities to improve written communication skills. Simultaneous development of an awareness of the culture in which the language is spoken is presented in contextual themes throughout the course, which include holidays, sports and leisure, geography and history of the Hispanic world.

• Language elective for 10th, 11th, and 12th grade students, 1 credit

• Prerequisite: Successful completion of Spanish II

The full year course builds on the vocabulary and structure introduced in the first two years and develops a more complex use of Spanish. The student will read authentic materials, sharpen his listening skills, and broaden his vocabulary acquisition to include synonyms and idiomatic phrases. A great emphasis is placed on past, future, conditional, imperative and present and past subjunctive tenses, as well as compound tenses. Simultaneous development of a broad knowledge of the culture in which the language is spoken is presented in contextual themes throughout the course, which include travel and tourism, health, occupations, political systems and festivals and celebrations.

SPANISH IV

• Language Elective for 11th and 12th grade students, 1 credit

• Prerequisite: Successful completion of Spanish III

The fourth year course is designed to build the proficiency of intermediate to advanced learners of Spanish in the skills of writing, vocabulary acquisition and usage, speaking, reading and listening. The students are given strategies for improved language learning, grammar explanations and exercises are provided using communicative activities and authentic texts and materials. Themes include health and sciences, historical events, fiction and reality, global issues and travel and geography. There are numerous cultural readings, oral and written practices, a complete grammar review and use of technology as a resource to the course. It is a very solid preparatory course for AP Spanish Language.

SPANISH LANGUAGE, ADVANCED PLACEMENT

Language Elective for 11th and 12th grade students, 1 credit

Prerequisites: Successful completion of Spanish III or IV with teacher recommendation

AP Spanish Language is a year-long course designed to prepare the student for success on the AP Spanish Language exam. The student will complete a thorough review of grammar and verb conjugations and build proficiency in the areas of reading, speaking, listening, writing and vocabulary recall. The student will move beyond language acquisition to language application in various formats and to make language learning a life-long endeavor. A great emphasis is placed on correct verb conjugations in all tenses. The student will be required to write several well-constructed essays, practice oral and aural proficiency daily through the use of authentic audio and video recordings. The student will improve reading comprehension by reading a variety of authentic texts. Learning about the various cultural practices and products of the Hispanic world is integrated throughout the course. An additional fee is associated with this AP course to cover the cost of the REQUIRED AP exam at the end of the year.

HISPANIC CULTURES

Elective, Open to 10th, 11th, and 12th grade students, 1 credit

This year-long course encompasses a study of the cultures of Spain and Spanish America, including such subjects as music, dance, art, folklore, religion and customs of daily life. Particular attention is paid to the ways in which elements of Spanish, Native American and African cultures have combined to create distinctive regional cultures.

***PLEASE NOTE: Elective courses that are offered are based on student interest and could vary year to year and new courses may be added.