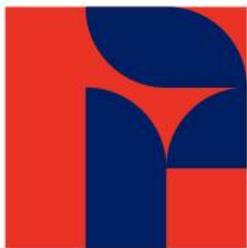


# HIGH SCHOOL CURRICULUM GUIDE

2022-23



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School of Louisville

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## **Introduction to the 2022-23 Curriculum Guide**

Curriculum overviews can be found under each department heading; these describe the core values and characteristic approaches of each academic discipline.

All course descriptions for full-year and first-semester courses are on view in the 2022-23 edition. Second-semester course descriptions are issued in late fall.

## Requirements and Policies

A strong college-preparatory program includes four years of English, history, and math; three or more years of sciences; and two or more years of world language. Students are required to take six credits of academic courses in the 9th grade and a minimum of five credits of academic courses in subsequent years, plus athletics/arts.

### A minimum of 22 credits are required, including

<b>English</b>	four credits; must be English I, II, III, and IV
<b>History</b>	three credits, one of which must be a world history course and one of which must be a US history course. All students are required to take a history course every semester
<b>Mathematics</b>	three credits, with required completion of Algebra I, Geometry, and Algebra II w/Trigonometry. All students are required to take a math course every semester (so students will generally end with four credits).
<b>Science</b>	three credits, one of which must be a physical science (Physics/Chemistry) and one of which must be Biology
<b>World Languages</b>	two credits earned in high school
<b>Art</b>	one credit, typically earned in the 10th grade
<b>Fitness &amp; Health</b>	one credit earned in the 9th grade
<b>Athletics</b>	three athletic activities, one each in Grades 9, 10 and 11
<b>Senior Project</b>	one credit in the Senior year

Students should keep in mind that when colleges look at a transcript, they consider not only grades but the quality and difficulty of the courses a student has taken. The overall quality of a student's program is more important than just grades or the number of courses. Graduation requirements ensure variety on transcripts, and electives are offered for depth in special areas of interest.

### **Credit for one-semester and full-year courses**

The school year at St. Francis is divided into semesters. Academic full-credit courses meet for the equivalent of one period daily during the full year, and mastery of course objectives earns one credit. Academic half-credit courses meet for either the equivalent of a period daily for one semester or two to three periods weekly for a full year, and mastery of course objectives earns one-half credit. A student who fails the first semester of a year-long course but passes the second semester in a demonstration of accumulated mastery may earn the full credit.

### Basic Course Sequence

	9th Grade	10th Grade	11th Grade	12th Grade
<b>English</b>	English I	English II	English III	English IV or AP
<b>History</b>	C&C I: Ancient	C&C II: Medieval	US History or AP	Senior Sem. or AP
<b>Mathematics</b>	Algebra I*	Geometry	Algebra II w/Trigonometry	Various
<b>Science</b>	Physics	Chemistry	Biology and/or AP	Student Preference
<b>World Language</b>	Spanish I, Chinese I**	Spanish II, Chinese II	Student Preference	Student Preference
<b>Art</b>		Art, Music, Photo	Student Preference	Student Preference
<b>Health</b>	Fitness & Health., Athletics	Athletics	Athletics	Student Preference
<b>Electives</b>			Student Preference	Student Preference

\*Students who have interest and appropriate background may place out of Algebra I or Geometry their freshman year and may be accelerated in the sequence.

\*\*Students who have interest and appropriate background may place out of the first year(s) of World Language, and may be accelerated in the sequence.

### **Grading Procedures**

The St. Francis grading scale is as follows: A+ (98-100), A (92-97), A- (90-91), B+ (88-89), B (82-87), B- (80-81), C+ (78-79), C (72-77), C- (70-71), NC (0-69). Grade point averages are calculated on an unweighted 4.0-scale as follows: 4.3 (A+), 4.0 (A), 3.7 (A-), 3.3 (B+), 3.0 (B), 2.7 (B-), 2.3 (C+), 2.0 (C), 1.7 (C-), 0.0 (NC).

### **Course Placement upon Entry**

Placement in math and world language will be based initially on satisfactory performance on an entrance exam and/or the student's having satisfactorily completed the previous level at another school. Reassignments may need to be made once school begins.

### **Core Courses**

Students who are enrolled in core courses (including English, history, math, science, and language courses) will not be allowed to withdraw from those courses at any time (including at the semester break) without written approval from the teacher and the Associate Head of School, Downtown Campus; said approval will only occur with extenuating circumstances. This includes the AP courses listed below. The drop/add period occurs during the first week or so of each semester and is primarily for junior/senior elective courses.

### **Advanced Placement Courses**

A number of courses at St. Francis are based on course outlines developed by the Advanced Placement Program of the College Board. These courses have the workload and rigor of courses found at the introductory college level. Taking such a course at St. Francis offers the student more academic challenge, an opportunity to see what college courses are like, and the possibility of gaining college credit. At the same time, the student has the advantage of the St. Francis small-class size, more frequent class meetings, and readily available help from teachers. Student performance in these courses can be evaluated on a nationwide scale after the appropriate AP exams are taken in May, and students are required to take these exams as part of their enrollment in the courses. Many colleges confer course credit for high grades on AP exams.

The following courses help prepare students for AP exams: AP English Literature, AP Calculus AB/BC, AP Computer Science Principles, AP Chemistry, AP Biology, AP Physics, AP Environmental Science, AP Statistics, AP U.S. History, AP Comparative Government & Politics, AP Chinese Language, AP Spanish Literature, and AP Spanish Language. These courses have heavier workloads; therefore, students interested in taking AP courses need to consider their overall course loads in consultation with teachers and their advisor. Students with appropriate prerequisites (as noted for each course) will be accepted into an Advanced Placement course based on the recommendation of teachers. Students who enroll in an AP course at St. Francis are required to sit for the exam in May. In addition to the courses offered, ad hoc preparation is offered for interested students for the AP World Civilization and AP English Language exams.

### **Independent Study**

Individual students or small groups may apply for independent-study projects under faculty guidance, if faculty time permits. Independent-study projects require extensive work with outside sponsors or a faculty tutor in a wide range of academic and non-academic fields. Depending upon the nature of these independent study projects, students may receive credit. Students are still required to take a full course load at St. Francis.

**Outside Credit**

Students wishing to pursue learning projects outside of SFS may receive St. Francis credit for classwork that has been pre-approved by the Associate Head of School, Downtown Campus and the Registrar. While St. Francis grants credit for these courses, grades will not be transferred; any grades received for outside coursework will not be averaged into the student's GPA. Students may be required to pass a St. Francis examination in order to receive credit for required courses.

**Transfer Credit**

Students transferring to St. Francis must request that an official transcript from their previous school be sent to the Registrar's Office. The previous school's transcript will be attached to the St. Francis transcript. Credits earned at a previous school(s) will be included in the total number of credits required for graduation from St. Francis, although grades from previous schools will not be included in the St. Francis GPA. St. Francis transcripts show semester grades.

**Community Service**

Community service is an important part of the St. Francis curriculum each year, with students and faculty/staff participating in six half-days of service each year.

**The Senior Project**

The Senior Project is intended to provide all St. Francis seniors with the opportunity to devote significant effort and time to a project focused on that which vitally interests them; develop the research skills expected of college-bound students; make a public presentation of their work; and demonstrate that their years at St. Francis have culminated in mature and confident scholarship. During the junior year, students determine and describe their projects and choose their advisors; they complete research, written, and performance components of their projects in their senior year. The Senior Project is a requirement for graduation; all those receiving a St. Francis diploma will have successfully completed this demanding and long-term undertaking and will have thus demonstrated the skills and commitment that the diploma certifies. *See more about the Senior Project on page 26 of this Guide.*

## English

### English Department Curriculum Overview

English at St. Francis is an intimate, collaborative, and creative practice.

*Inside the English classroom*, students' desks are arranged in circles or their chairs around a seminar table. Each academic year, English teachers and students are members of a small community in which students' intellectual, aesthetic, and personal discoveries are elicited. The heart of English teachers' work at St. Francis is to arrange for, encourage, model, coach, and, when necessary, insist on thoughtful expression in individual voices. The heart of students' work in English is a variety of projects and texts leading a variety of individuals to the pleasures of literacy and of confident, competent self-expression; the heart of students' work is also collegial, as in workshops and seminars they experience the whole as greater than a sum of parts, taking part in a searching, open-minded, many-voiced conversation.

*Outside the classroom*, our communal dialogue begins on the first day of school, when students share their responses to the all-school summer-reading. That discussion continues throughout the year at every Morning Meeting, which ends with a student or staff member reading a poem of their choosing. In years when there is a Showcase of Student Plays produced, student writing is performed. The communal conversation comes to a close at the end of the year, with the publication of an ambitious student literary magazine and the presentation of faculty/staff written speeches about each graduating senior. The collective creative process also involves extracurricular activities and independent creative projects, including Senior Projects. The St. Francis community is a space of publication and engaged literary discourse.

At St Francis, we believe that to take the time, effort, and care to consider not only what we say but how we say it, and to pay close, careful attention – whether as participants in a revision workshop, readers of a monumental poem, or audience members at a spoken-word performance – to the words of others are not only indispensable human responsibilities but also educated pleasures no one should have to live without.

### English Department Course Offerings

#### English I (1 credit)

In English I, we use writing and reading as extensions of thinking. We focus on craft, the writing process, and the use of rhetoric as a means of communication and expression. We read texts closely, producing and developing our own ideas and allowing ourselves to be influenced by what we read and question what we read. We learn from past and contemporary masters of English letters. We write academic papers. We write creatively. We use the imagination - stretch, unhinge, create. Please remember “there is no sight without fire.” (Ezra Pound, Canto 98).

#### English II (1 credit)

Sophomores study vocabulary in the context of the reading material. Usage and sentence structure will be addressed throughout the year. Students will write frequently in a variety of genres, including journal responses, poems, short fiction, memoir, and formal analytical essays, and will read in all genres, including lyric poetry, drama (a Shakespeare play), short stories,

novels, and literary criticism.

### **English III (1 credit)**

This course approaches American literature less as a natural evolution or a set of specific stylistic characteristics than as a varying series of responses to the historical, technological, intellectual, and political conditions of everyday life in the United States. In the course of our literary analyses, we will address how American literature grapples with notions of personal and collective identity, the social conditions of marginalized populations, and what being **American** has come to mean over the course of time into the contemporary moment. We will concentrate heavily on honing our writing skills with special attention to strong sentence composition and carefully crafted self-expression. Students will also be asked to reflect upon their roles as part of a larger community of academic inquiry where each personal voice is valued. Assigned readings will include novels, poems, short stories, a play, and a graphic narrative. Since visual culture plays an important role in our investigation of this period, we will also watch excerpts of films during the course of the semester. Class meetings will combine lecture and discussion formats. Passionate and thoughtful participation is required.

### **English IV (1 credit)**

Welcome to the final English class of the secondary school experience. For this very reason, this class is designed to ensure students are prepared for what lies ahead in regards to academic research and writing. This is a college-preparatory course. The class focuses on developing a wide variety of writing modes, from professional communication to scholarly annotations to engaging creative nonfiction. We also discuss and practice delivering well-crafted, effectively executed presentations. Over the course of the year, we read a host of genres, from the personal essay to the novella to Shakespearean drama.

### **AP English Literature and Composition (1 credit)**

*Prerequisites: B+ in the second semester of English III, recommendation of the English III teacher, and permission of the teacher of this class.*

*Enrollment in this class is contingent upon the successful completion of a summer reading and writing assignment.*

This course will be most appropriate for students with brisk reading speed and good comprehension, some interest in poetry, and a willingness to work hard to improve their writing about literature. Emphasis will be on reading (mostly monumental) canonical works – poems, plays, novels, and essays – and on learning to describe their artistic achievements in a lively personal voice. Historical and cultural contexts as well as contemporary literary theory will be introduced and discussed.

### **English Department Electives**

*The following elective courses are being offered to gauge student interest; they will actually occur subject to sufficient enrollment. **Students are advised to put second and third choices for all electives.***

### **Film Studies I: New Hollywood** (*½ credit*)

Somewhere along the way, Hollywood became obsolete. Tired, flat, sterilized films of the 1950s and 1960s began to aggravate the American public. A world on fire compelled crowds to demand more from their movies. And along came the New Hollywood. From 1966 to 1975, American film studios altered the face of what we consider cinema. This class will examine that period, its antecedents, its influences abroad, and its subsequent effect on the industry. We'll be watching some of the most daring American films of all time and addressing their impact on the future of cinema.

### **Creative Writing I: Reading & Writing Poetry** (*½ credit*)

In this course, students will engage in a wide variety of projects and games, all centered around 20th and 21st-century poetry (and also including, from the 9th century, a little of the Anglo-Saxon poetic form). Students will draft and revise their own poems, in free verse and forms, starting from many models, games, and prompts. In a writing workshop, students will contribute ideas for the revision of their peers' drafts. We will also work on performing poetry; the class will plan and host a poetry reading. Because poets also read poetry, the course will ask students to devise their own reading lists, focusing on three or four contemporary published poets, who will become their textual mentors and whose work they'll present to the class at intervals. Attending one poetry reading each semester will be required. Students interested in serving as an editorial board for the 2022-23 literary magazine will have that opportunity in April and May. The course may be taken for either the fall or spring semester, or both.

### **(Afro)Futurism: the Role of Science Fiction in Black, Ethnic, and Queer Studies** (*½ credit*)

Do you love sci-fi literature, films, or comics that help you imagine a future world different from our own? Have you ever stopped to consider why so many writers, artists, filmmakers, and musicians in the fields of Black, Ethnic, and Queer Studies experiment with science fiction? This class is for anyone interested in these questions and more. We will begin by examining the term "AfroFuturism" and its origins in 20th-century African American art and music. The course will then consider the ways in which the field has grown and expanded to include writers, artists, and filmmakers from other backgrounds. We will read, listen to, watch, and discuss works from many genres, including films like *Black Panther*, comic books like Victor LaValle's *Destroyer*, music videos such as Janelle Monáe's "Dirty Computer," and the poetry of Eve L. Ewing.

### **New Voices Playwriting at St. Francis** (*Fall during Projects, 1/4 credit*)

In this course, held during Projects during the first semester and taught by Actors Theatre educators, students will write several short plays that speak authentically in their own voice. Exercises will prompt students to explore character, dialogue, and dramatic action. There will be an emphasis on giving and receiving feedback and revision. Student-written plays will be submitted to the Actors Theatre of Louisville New Voices Young Playwrights Contest, where winning plays are developed and fully produced in an evening of world premieres performed on stage at Actors Theatre by members of the Acting Apprentice Company. In addition, plays written in the class will be eligible for St. Francis School's drama production, the Showcase of Student-Written and Directed Plays that will premiere in December. The class is open to students in all grade levels.

## Fine Arts

### Fine Arts Curriculum Overview

Fine Arts at St. Francis take the form of studio art, music, and photography/filmmaking. The studio art course offers experience in the basics of achieving classical drawing skills in a range of media; experience in the collaborative creation of conceptual art; some work in 3-D art; and an introduction to art history. The classroom is informally structured to encourage students to work individually yet find encouragement and inspiration from classmates around them. The music class focuses on ensemble performance, technique, and history, and has a formal performance twice per academic year. Music students can also take Music Theory and/or Jazz Ensemble alongside Music Performance. The photography/filmmaking class focuses on making art from behind the camera, combining creativity and technique. Students also learn to edit their work with various programs. Students choose one fine arts course in 10th grade and can continue taking fine arts courses on an elective basis thereafter.

Current work from the studio art course and the photography/filmmaking class is invariably on display in the hallways; music students perform for the school community several times throughout the year.

Teachers in fine arts classes are designated as artists-in-residence. The goal of the artist-in-residence is to help students find that unique individual voice that presents itself in any given media and encourage its growth. All the artists-in-residence have active professional careers distinguished by years of dedication to their crafts and by reputations that extend beyond the school community. Their career focus provides a window into the highly competitive world of art and music as professions.

Art and music students are asked to keep open minds and work thoughtfully. Their shared experiences with art- and music-making are discussed in critiques that emphasize each person's growth and unique vision. Perceptions are challenged in discussions that lead to a greater appreciation of the unlimited range of expressiveness.

### Fine Arts Department Course Offerings

#### **Studio Art** *(1 credit)*

In this course, students will work and play with ideas almost as much as actual physical materials. Alongside learning advanced techniques in drawing, painting, printmaking, sculpture, and installation, emphasis is placed on developing a sense of conceptual creativity and an advanced vocabulary for discussing art. Students will learn that in today's postmodern world, there are many ways of being a great artist and there are no definite rules for what art should look like--except that good and important work must be made with rigor, energy, meaning, and/or relevance to its context. Students that come to this class with an open mind and a commitment to improving their skills will leave with new knowledge about art processes, about themselves, and about what art can mean to society at large.

**Advanced Studio Art (1 credit)**

*Prerequisite: Studio Art and permission of the instructor*

This class aims to foster self-motivation, self-discipline, curiosity, and a strong spirit of independence in students wishing to expand their education in studio art. Students may explore in-depth a particular area of interest throughout an entire school year, resulting in a final cohesive body of work. Time management is an essential skill to develop in this class in order to be successful and an emphasis is placed on the importance of finding a balance between experimentation and focus. Students are asked to do research outside of the classroom in the form of visits to local art collections to increase their awareness of relevant historical and contemporary contexts. Weekly group discussions among the Advanced Art students, along with twice-yearly formal group critiques, contribute to creating a dynamic and supportive community within which Advanced Art students may cultivate their work.

*\*Students may take this class at the same time that they are completing a Senior Project focusing on art, but their work in Advanced Art must be separate from that for the Senior Project (though one can be complementary to the other).*

**Photography/Filmmaking (1 credit)**

This class will provide a basic background in and working knowledge of the art and craft of photography and filmmaking. Students view the world through a lens, shooting, editing, and critiquing their work. They will spend time getting to know the tools of these crafts while also exploring the artistic possibilities they afford. From the technical details of how cameras work to editing programs to managing images and files, students will get a thorough understanding of the art and the mechanics of working behind and with cameras.

*\* Students who have taken Photography and are interested in advanced study should discuss that with the Registrar. Students may take this class at the same time that they are completing a Senior Project focusing on photography or film, but their work in this course must be separate from that for the Senior Project (though one can be complementary to the other).*

**Music Performance (1 credit)**

This course will build on the fundamentals of musicianship and creativity through performance. Unit topics and repertoire will include a wide variety of styles and musical eras ranging from, but not limited to, Baroque, Folk, Mountain, Jazz, Rock, Pop, and Hip Hop. Other styles and genres will be explored as well, but this will be based on the abilities and desire of the ensemble. Students in Music Performance are expected to perform at school functions where music is a desired element. Students are expected to perform two concerts outside of the school day. Typically, these include one evening concert which will be scheduled in the winter and a spring concert. In addition to the above performances, students will also learn basic music theory and will write and have the opportunity to arrange music for the ensemble. Grades will be awarded based on attitude, participation, musical growth, weekly written assignments, and attendance at performances. Requirements include regular practice at home; daily ensemble participation, and auditioning for All-State/All-District Band, Orchestra, Choir, Jazz Band, GSA, regional honors groups, or other pre-approved outside ensembles. Students in this course will be fully graded.

**Music Theory** (*½ credit*)

Music Theory is an advanced course for music students. Participants will learn how to read, write, analyze, and perform music in preparation for music theory courses after high school. The course is designed for the advanced musician to more thoroughly understand the components of music and music composition. All assignments and topics are studied to enable the student to successfully complete basic college theory classes. Students will also be able to compose music and understand the guidelines used in music composed by others. It is preferred that students can already read music and have been a member of one of our music ensembles before taking this course, but it is not required. Students will need access to basic technology at home to complete the course.

*\*Students who have already taken this course may take an Advanced Theory course with the permission of the instructor.*

**Jazz Ensemble** (*During Projects, 1/4 credit*)

Jazz Ensemble is open to interested vocal and instrumental students and will be held yearlong during the Projects period. The course will be centered on jazz history and appreciation, as well as learning and performing jazz repertoire. The jazz history/appreciation portion will be focused on jazz standards, famous albums, and artists. Students will learn style as well as try to transcribe recorded solos. The performance portion will be focused on jazz combo repertoire and ensemble performance. Please note, participation in concerts and occasional rehearsals outside of the school day are required for credit in this course. These performances include, but are not limited to the winter and spring performances and various school functions. In addition, all students will be strongly encouraged to audition for the KMEA All-State Jazz ensembles in December. A strong knowledge of scales and chord structures will be helpful for all students but is not a requirement for entering the ensemble.

## History and Social Sciences

### History Department Curriculum Overview

The goal of the History Department is to encourage thoughtful reflection and independent thinking about historical events through the study of geography, social conditions, and categorical contexts. Our focus is global and as a result, we emphasize connections more than isolated facts. A continuous effort is made to meaningfully connect the past to the present and the present to the past: thawing frozen history and making sense of the contemporary world.

In accordance with this goal, St. Francis requires students to take four years of history. During the first two years of the curriculum, students are introduced to civilizations, cultures, and socio-religious traditions in the ancient and medieval worlds, respectively. In addition to providing a cultural and geographical base, the Culture and Civilization courses in the freshman and sophomore years stress basic research techniques, primary-source textual analysis, and effective written expression. Most classes are conducted in the discussion format, emphasizing respectful interaction.

In the junior year, students take U.S. History or AP U.S. History. Seniors take AP Comparative Government and Politics, a course that analyzes and compares the governmental structures of six different countries, and/or they choose elective seminars, which focus on relevant current issues such as law, race, gender, and politics both domestic and international. This culminating year prepares students for college academic work by covering a demanding curriculum that stresses independent reading and research as well as lively and informed classroom discussions.

### History Department Course Offerings

#### **Culture and Civilization I (Ancient World) (1 credit)**

This is the first part of a two-year World History sequence required for all 9<sup>th</sup> graders. In this course, students begin with an overview of cultural anthropology. Using this as a basis for exploration, students survey world history from its beginnings in Africa and Asia to the advent of the Middle Ages in Europe. Main themes include the borrowings from and blending of cultures, the characteristics of empires, and the reasons for the declines of civilizations. Students will be introduced to several historical tools, including document analysis, religious texts, archeology, and literature. Geography – using many types of maps – is a course component throughout.

#### **Culture and Civilization II (Medieval World) (1 credit)**

This course for 10<sup>th</sup> graders will apply critical thought to the concepts and historical records of cultures and civilizations in medieval global history. Different strands of Vedic theism, Christianity, Buddhism, Islam, and other traditions, as well as identities associated with ethnicity and socio-economic groups, will be addressed in context. The object is to provide students with the tools to act and communicate meaningfully in an interdependent world community. Students will also complete a year-long research and writing project in this course.

### **United States History (1 credit)**

This course will use chronological and thematic approaches to examine our nation's past, in order to provide students with a necessary base as they assume the mantle of adult citizenship. The parameters of the instruction will be from European contact up until the present day, and students will examine common themes (government, economics, religion, war, society, and culture) across time to gain an understanding of how the past impacts the present. Skill development will stress coherent written and oral expression, researching in a time of technological change, and clear reasoning and interpretation. Class requirements will include a significant amount of reading and formal writing assignments.

### **AP United States History (1 credit)**

*Prerequisites: Permission of the department*

*Enrollment in this class is contingent upon the successful completion of a summer reading and writing assignment.*

AP U.S. History covers the spectrum of American history from pre-Columbian days to the present. Using chronological and thematic approaches to the material, this course exposes students to extensive primary and secondary sources and to the historiographical interpretations of various scholars. Thoughtful class participation and written assignments will be crucial to success in this course. This course may be taken by juniors in lieu of regular U.S. History or by seniors who have already taken the regular U.S. History course.

### **AP Comparative Government and Politics (1 credit)**

*Prerequisites: Permission of the department*

*Enrollment in this class is contingent upon the successful completion of a summer reading and writing assignment.*

AP Comparative Government and Politics is an introductory college-level course in comparative government and politics. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students cultivate their understanding of comparative government and politics through analysis of data and text-based sources as they explore topics like power and authority, legitimacy and stability, democratization, internal and external forces, and methods of political analysis. This approach to understanding the world is particularly important in light of recent geo-political events, both in the United States and abroad. The summer reading assignment will help students situate themselves in the context of the United States' system.

### **Senior Seminars**

*Senior Seminars provide students the chance to pursue focused study of selected topics, often in 19th- and 20th-century history as well as the current day, and will include intensive reading, involved discussion, and presentation of papers. Proficiency in world geography is a requirement of the courses. **Seniors not enrolled in an AP History course must take one Senior Seminar each semester.** Juniors may enroll in these courses as electives. Each is offered for ½ credit. These courses are being offered to gauge student interest; they will*

*actually occur subject to sufficient enrollment. **Students are advised to put second and third choices for all Senior Seminars.***

**Constitutional Law** (*½ credit*)

This course will examine the many aspects of United States constitutional law from legal and historical perspectives. Students will read actual case law and learn how to thoughtfully digest legal opinions and to develop the vocabulary and tools necessary to understand how the Constitution shapes American life and serves as a useful reflection of American history. In completing the course students will: increase their understanding of how judicial decisions reveal constitutional law doctrine and how lawyers advocate for changes in constitutional law; further develop their research and writing skills; better understand current events; and be better equipped to become informed, involved citizens. Substantively, this course will also focus on First Amendment freedoms: why we have them, how they work, and how they can be protected.

**Queer Studies** (*1/2 credit*)

This course will examine queer histories and the history of "queer" as a social label, current theories of queer identity, and queer activism in the 20th and 21st centuries, mainly by examining primary sources (memoirs and oral histories; legal codes and court cases; queer manifestos and other publications) in context. We will begin in the colonial period to study how non-binary identities were formulated in European colonial and indigenous societies and continue through the present day, discussing recent civil rights gains and efforts to roll back those gains. We will pay particular attention to the ways conceptions of queerness and queer people's experiences vary across race, class, and ethnicity. Class requirements will include reading comprehension check quizzes, response essays, and a short research project.

**Visible Language: Writing and Literacy in the World Today** (*1/2 credit*)

While our brains are hard-wired for speech, writing is a technology that can only be learned with considerable time and effort. Yet it's difficult to imagine our world without writing, or even to go a day without experiencing it in some way. This is a recent development, for until a few centuries ago, most people in most societies could not read or write. How did writing become so pervasive, and, for that matter, what is writing? What relationship does writing have with speech, and what are the cognitive processes involved with reading and writing? This course seeks to answer these and other questions through an examination of the major writing systems of the world. How did they develop, and what does their future hold in this digital age?

*\*Spring Senior Seminars will be announced in November, and students will sign up for them then.*

## Mathematics

### Math Department Curriculum Overview

The math department at St. Francis strives to provide students with not only the mathematical skills they will need to take their place in a technologically advanced society, but also with the fundamental skills, procedures, mathematical thinking, problem solving, and good judgment to continue their mathematics education at the most competitive universities and throughout their careers. We emphasize the necessity of communicating answers in mathematically correct notation and in complete sentences. Students are encouraged to be part of the process, driving discussions, working through problems, seeing teachers for help, and being advocates for their own education.

We offer a full range of coursework in high school mathematics, beginning with Algebra I, Geometry, and Algebra II with Trigonometry, and with a range of options after Algebra II. In math courses from Algebra I through Precalculus, we use the College Preparatory Mathematics texts, which emphasize the importance of students confidently discovering the fundamentals of math through thoughtful problem solving and application of their basic skills. This process builds confidence in all students regardless of their past math experiences. After Algebra II with Trigonometry, students can opt for FST (Functions, Statistics, and Trigonometry), Precalculus, AP Calculus AB and/or BC, AP Statistics, AP Computer Science Principles, and sometimes even higher-level courses beyond this curriculum like Set Theory and Logic or Differential Equations. Texts for these courses are college-level and emphasize correct and consistent use of mathematical vocabulary and notation. A TI-84+ calculator is required for St. Francis math courses, beginning with Algebra I.

Beyond the ordinary curricula, we offer students the chance to participate in the Greater Louisville Math League, a challenging competition held four times per year, with both individual and team scores reported. Selected students are also invited to participate in the American Math Competition, the first level of a talent-search process.

### Math Department Course Offerings

#### **Algebra I** (1 credit)

This is an introductory course in algebra covering the basics of using variables and grouping symbols, exponents, and real numbers, including irrational numbers. Topics will include functions, linear relationships, simplifying expressions and solving equations, systems of equations, arithmetic and geometric sequences, modeling two-variable data, exponential functions, quadratic functions, and solving quadratic equations and inequalities. There will be considerable emphasis on word problems and on the correct and consistent use of appropriate mathematical notation and vocabulary.

**Geometry (1 credit)***Prerequisite: Algebra I*

As well as being the study of the mathematics of points, lines, planes, and other geometric objects, geometry is concerned with the process of careful, organized, abstract thinking. Students will learn the importance of careful definitions and learn to make conjectures and justify arguments through different types of formal and informal proofs. Additional topics will include congruence and similarity, solid geometry, coordinate geometry, transformations, and graph theory.

**Algebra II with Trigonometry (1 credit)***Prerequisites: Algebra I and Geometry, or concurrent enrollment in Geometry*

This is the sequel to Algebra I, and although it is usually taken after Geometry, concurrent enrollment in Geometry will provide the necessary background. Topics covered will include linear and quadratic functions, systems of linear and nonlinear equations, polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions.

**Precalculus (1 credit)***Prerequisites: Algebra II with a minimum grade of B- and permission of the instructor*

This is a course for students who plan to take calculus or have the necessary level of interest. Topics will include a detailed study of functions, including polynomial, exponential, logarithmic, logistic, rational, and trigonometric functions. Other topics include conic sections, polar- and parametrically-defined functions, vectors, complex numbers, matrix algebra, sequences and series, basic combinatorics, and probability. The correct use of and the limitations of scientific calculators will be emphasized.

**Functions, Statistics, and Trigonometry (FST) (1 credit)***Prerequisites: Algebra II*

FST is a course that overlaps both Algebra II and Precalculus. The material covered in this class will review some of the more difficult and important concepts from Algebra II, preview a number of topics that are explored in more depth in Precalculus, and teach students a number of more advanced probability and statistics concepts. This course is appropriate for those who want to stay fresh on their algebra skills before going to college or those desiring a more manageable pace through the material than that in Precalculus.

**AP Calculus BC (1 credit)***Prerequisites: Precalculus and permission of the department*

AP Calculus BC is the equivalent to two college semesters of Calculus (or Calculus I and II) and covers both the AB and BC curriculum. We will study limits, derivatives, integrals, and their applications the first semester and focus on advanced integration techniques, infinite series, and the calculus of parametric and polar functions in the second semester.

**AP Statistics (1 credit)***Prerequisites: Algebra II and permission of the department*

This AP course in Statistics will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) Exploring data: describing patterns and departures from patterns; (2) Sampling and Experimentation: planning and conducting a study; (3) Anticipating Patterns: exploring random

phenomena using probability and simulation; (4) Statistical Inference: estimating population parameters and testing hypotheses.

**AP Computer Science Principles** (1 credit)

*Prerequisites: Algebra II and permission of the department*

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. This course also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem-solving. Together, these aspects make up a rigorous and rich curriculum that aims to broaden participation in computer science.

## Science

### Science Curriculum Overview

When you walk into a St. Francis science classroom, you'll find students engaged in applying scientific principles to everyday life. Whether it's designing a safe but universally thrilling roller coaster in physics, creating simulations for bonding theories in chemistry, or sampling local waterways in biology, students appreciate science as a process, rather than an accumulation of facts.

St. Francis embraces the Physics First curriculum philosophy, which elevates Biology to a capstone course. The required core curriculum sequence is Conceptual Physics for freshmen, Chemistry for sophomores, and Biology for juniors. Rather than merely flipping the traditional order, this sequence of courses allows students to progressively build on their scientific knowledge and curiosity.

Beyond the three core courses, students have the opportunity to take semester electives and/or Advanced Placement courses in physics, biology, environmental science, and chemistry. Students can also participate in the Science Olympiad, which is a national science competition involving physics, engineering, biology, and general science.

A St. Francis alum will have the tools to critically analyze the often- oversimplified presentation of scientific data in news, advertisements, and pop culture. Through collaborative investigations and student-centered classroom discussions, students learn how to develop good questions, how to research and analyze the world around them, and how to effectively communicate their findings to the greater community.

### Science Department Course Offerings

#### **Physics** (1 credit)

What keeps airplanes in the air? How does a compass know how to point north? Would it be possible to play baseball on the moon? In this course, students address these and more questions, and, in the process, investigate the deepest principles that govern life and the universe. Physics is about discovering the fundamental laws of Nature and students in this course study not only those laws but also the process of discovery that has brought about the modern age of science. Students in Conceptual Physics conceptually explore topics including motion, forces, energy, waves, light, electricity, magnetism, and atomic physics through a combination of lecture, discussion, labs, and hands-on activities.

#### **Chemistry** (1 credit)

Chemistry is the study of matter, its structure, and transformations. In this inquiry-based course, students design and conduct experiments to answer questions about the chemical nature of their surroundings. Presented with a series of authentic problems, students work to devise methods to find solutions, collect and analyze data, and communicate the connections between the concepts and their observations in a variety of ways. Over the course of the year, these experiments, along with readings, discussions, and multimedia simulations, help students construct an understanding of the nature of the forces that hold matter together and the

changes associated with establishing or disrupting those forces. A broad range of experiments serves to familiarize students with standard laboratory procedures and methods for analyzing data, as well as providing them with an appreciation for the inherent uncertainty in measurements. Major topics include atomic structure and periodicity, chemical nomenclature and formulae, chemical reactions and equations, stoichiometry, chemical bonding, the structure and properties of matter, the role of energy in chemical and physical change, and the study of gases and solutions.

### **Biology (1 credit)**

Biology is the study of living things. Starting with the cell and its many structures, students will gain an understanding of how things work within individual organisms and how organisms interact with other organisms within their environment. Hands-on classroom activities will enhance scientific thought development and understanding of the living things around us.

### **AP Physics C: Mechanics (1 credit)**

*Prerequisites: Physics and Chemistry; Precalculus or AP Calculus must be taken concurrently with or prior to this course; permission of the department required.*

*Note: Students who have not \*completed\* Calculus before taking Mechanics will have a summer reading assignment. In addition, they will need to spend considerable extra time with the instructor at the beginning of the year in order to learn the math they need.*

This course provides a foundation in kinematics (the study of motion) and dynamics (the study of force), the two branches of mechanics. Topics include one-dimensional motion; projectile motion; Newton's laws; work, energy, and power; linear momentum; circular and rotational motions; gravitation; and simple harmonic motion (oscillations). The course makes extensive use of calculus; however, interested students taking Precal may enroll with permission from the instructor.

*\*AP Physics C: Mechanics and AP Physics C: Electricity and Magnetism are offered in alternate years.*

### **AP Biology (1 credit)**

*Prerequisites: Biology, except in exceptional cases, and permission of the instructor  
Enrollment in this class is contingent upon the successful completion of a summer reading and writing assignment.*

Advanced Placement Biology is a challenging course that covers both classical and modern concepts of biology. The ongoing knowledge explosion in biology makes these goals even more challenging. However, the primary emphasis is on developing an understanding of biological concepts. Essential to this conceptual understanding are: a grasp of science as a process rather than an accumulation of facts; personal experience in scientific inquiry, recognition of unifying themes that integrate the major themes of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Students who complete this course are sufficiently prepared to take the AP Exam in May.

*\*AP Biology and AP Environmental Science are offered in alternate years.*

**AP Chemistry (1 credit)**

*Prerequisites: Chemistry; permission of the instructor*

Advanced Placement Chemistry is the equivalent of a full-year major's undergraduate chemistry course and is designed to follow the successful completion of introductory Chemistry. Topics include the structure of matter, kinetic theory of gases, chemical equilibria, chemical kinetics, and the basic concepts of thermodynamics. Strong emphasis is placed on chemical calculations and the mathematical formulations of principles. The course should contribute to the development of the students' abilities to think clearly and to express their ideas, orally and in writing, with clarity and logic. This rigorous course is intended for students who have demonstrated a willingness to commit considerable time to studying and completing assignments outside of the classroom.

**Science Department Electives**

*The following elective courses are being offered to gauge student interest; they will actually occur subject to sufficient enrollment. **Students are advised to put second and third choices for all electives.***

**Anatomy and Physiology I (½ credit)**

This semester-long course covers both the structure and function of the integumentary, skeletal, muscular, nervous, and endocrine systems. Students will engage in laboratory and in-class activities that will reinforce concepts and principles presented in class.

**Circuitry and Robotics I (½ credit)**

What are robots? What steps are necessary to design and program robots to accomplish specific functions? In this project-based course, we will explore essential concepts in circuitry with a focus on switches and logic circuits. Those concepts will be applied towards the design, programming, and building of robotic machines. Students should enroll with a willingness to challenge themselves, improve their design and analysis skills, and apply their creativity towards solving problems.

**Astronomy - The Solar System (½ or 1 credit)**

This course offers an introduction to the solar system, our "cosmic town." We'll survey the objects that orbit our sun, with their respective satellites, and examine what we know and how we know it. If the interest is there, we will continue the class for a second semester, examining questions such as: Where are we in the universe? How did the universe form, and when? What is a black hole? a quasar? a pulsar? a supernova? This course uses basic principles from physics, chemistry, and biology, with virtually no math.

## World Languages

### World Languages Curriculum Overview

It is the mission of the World Languages Department at St. Francis to prepare students for college and life by giving them the tools to effectively communicate orally and in writing with people of diverse ethnic, religious, and cultural backgrounds.

When you enter the language classroom, you'll hear students conversing in Chinese or Spanish with each other and the teacher. These conversations frequently continue into the hallways between classes, creating a positive global atmosphere in the school. Beginning with introductory-level classes, students are encouraged to use their language skills. We want students to become comfortable with speaking and writing in a second (or even a third) language. The best way to develop these skills is to speak and write a language daily. Language classes are anything but boring. Teachers use a variety of participatory, hands-on activities to motivate students so they can focus on communication.

Students also have the opportunity to travel abroad with their language teachers. In recent years, students have traveled to Peru, Ecuador, the Galapagos, and China. These trips allow students to become totally immersed in the language and culture and to experience daily life in another country first-hand.

The World Languages Department offers beginning, intermediate, and AP courses in Chinese and Spanish, allowing interested and capable students to pursue a more in-depth study of the literature and culture of their chosen language(s). St. Francis students are required to complete two consecutive years of the same language in order to graduate. Our graduates who complete four years of language study with us report themselves extremely well prepared for college-level language courses.

### World Language Course Offerings

#### **Chinese I** (1 credit)

Students will begin to practice the four skills of listening, speaking, reading, and writing, as well as learn about Chinese culture and society. At the end of the course, the proficiency goal is for students to be at Novice High on the ACTFL scale. Students will begin learning the pinyin Romanization system and begin to learn simplified Chinese characters. Students will be expected to complete homework every day, to participate each class in in-class activities and assignments, and weekly pinyin and vocabulary quizzes to demonstrate improving proficiency from the beginning of the year at Novice Low to the end of the year at Novice High. Students will also complete projects that will increase their knowledge of Chinese culture and society. Topics include greetings, family, dates and time, hobbies, visiting friends, making appointments, and shopping.

#### **Chinese II** (1 credit)

The course continues proficiency goals from Chinese I. Students will be expected to complete homework every day, participate in in-class activities and assignments, and weekly pinyin and vocabulary quizzes to demonstrate proficiency at Intermediate Low. Students will also complete projects that will increase their knowledge of Chinese culture and society. Topics include

studying Chinese/school life, weather, dining, asking directions, invitations, seeing a doctor, dating, home, and sports.

**Chinese III (1 credit)**

*Prerequisite: Chinese II; permission of the instructor*

This course continues language skills from Chinese I and II. The emphasis will be on conversational skills, and more challenging readings in the language in character-only materials. Students also will work on projects and reports on Chinese cultural topics, enhanced with films. Students will enhance their knowledge of grammatical structure and improve their reading and writing skills in Chinese characters. Topics include travel, school life, living quarters, Chinese food, shopping, and academic subjects.

**Chinese IV (1 credit)**

*Prerequisite: Chinese III; permission of the instructor*

This course continues language skills from Chinese III. Students also will work on more challenging projects and reports on Chinese cultural topics, enhanced with films. Students will enhance their knowledge of grammatical structure and improve their reading and writing skills in Chinese characters. Topics include dating, technology, working, education, geography, Chinese holidays, changes in China, and traveling in China.

**AP Chinese Language and Culture (1 credit)**

*Prerequisite: Chinese IV; permission of the instructor*

*Enrollment in this class is contingent upon the successful completion of a summer reading assignment.*

AP Chinese Language and Culture refines and further develops students' abilities in Chinese oral and formal written communication with particular emphasis on advanced conversation, reading, and formal writing based on the recommended topics and the syllabus for the AP Chinese Language and Culture examination in May. The class is conducted almost entirely in Chinese and students are required to hone their speaking skills through structured and informal activities. Students will develop written skills and practice grammar through periodic compositions. Listening skills are developed during class discussions, viewing films and movies, and listening to recordings done by native Chinese speakers. Reading skills are improved through various readings of essays and articles, newspaper articles, advertisements, and poetry.

**Spanish I (1 credit)**

This class is the foundation course in Spanish. Students take their first steps in reading, writing, and understanding spoken Spanish. A variety of useful topics, including family, school, self, food, weather, and clothing, are presented. Emphasis is on listening and speaking skills. Students communicate in Spanish with each other and with the teacher, using role-playing, short oral presentations, conversation cards, and other small-group activities.

**Spanish II (1 credit)**

This course builds upon the foundation of communication skills begun in Spanish I with special emphasis on the past tenses. The topics covered include travel and vacation, celebrations and holidays, health and health care, and chores and pastimes. The students study Hispanic life and customs with concentration on travel to Spain and Latin American countries, as well as cultural traditions and celebrations. The emphasis continues to be on using the content to communicate in Spanish, with more focus on reading and discussion than in Spanish I.

**Spanish III (1 credit)**

*Prerequisite: Spanish II; permission of the instructor*

This class advances students' abilities to accurately and effectively communicate orally and in writing in Spanish. More abstract topics – the environment, current events, the arts, jobs, and banking, among others – allow students to express themselves creatively. Students learn to state their opinions, explain likes and dislikes, refer to hypothetical situations, and persuade others. They are introduced to classical Spanish texts: *La Celestina*, *Lazarillo de Tormes*, and *Don Quijote* as well as articles from Spanish-language publications.

**AP Spanish Language (1 credit)**

*Prerequisite: Spanish III, with a minimum grade of B, and permission of instructor*

*Enrollment in this class is contingent upon the successful completion of a summer reading assignment.*

This course continues to build on the skills learned in previous years of study, with particular emphasis on advanced conversation, reading, and formal writing based on the recommended syllabus for the AP Spanish Language examination. Students participate in daily conversation activities and oral presentations to help them focus on particular topics outlined in the AP curriculum. Students read and discuss fiction works by noted Hispanic authors. This course prepares students to take the AP Spanish Language exam in May.

**AP Spanish Literature (1 credit)**

*Prerequisite: AP Spanish Language, with a minimum grade of B and permission of the department*

*Enrollment in this class is contingent upon the successful completion of a summer reading assignment.*

The curriculum of this in-depth course is determined by the syllabus of the AP Spanish Literature examination. It requires extensive reading of literary texts dating from the Middle Ages to the present. Students will write a variety of literary-analysis essays, do oral presentations and learn more advanced vocabulary.

## Transitions

**The 9th-grade Fitness, Health and Skills course and the 12<sup>th</sup> grade Senior Project** serve as bookends to the St. Francis education. The former provides a transition between middle school and the demands of high school; the latter serves as a culminating demonstration of the skills St. Francis students learn in their time here.

**The Fitness, Health and Skills course** takes the physical education and health requirement for high school graduation in Kentucky a few steps further. In addition to two Fitness sessions per week and coverage of health topics such as nutrition, sex education, substance use/abuse, and mental health, we ask the question: What do college-bound high school freshmen need to know? Then we spend the year answering it, moving from current events awareness to research skills to analysis of our learning and communication styles to public speaking.

The **Senior Project** begins with a proposal process in the spring of 11th grade, includes significant research, and concludes usually in the spring of 12<sup>th</sup> grade with a presentation and a written component. The Project is intended to provide all St. Francis seniors with the opportunity to devote concentrated effort and time to a project focused on that which interests them most, to develop those independent research skills which are more and more being expected of college-bound students, to experience the tensions and rewards of a public presentation of their work, and to demonstrate that their years at St. Francis have culminated in the maturation of the integrated and confident intelligence which it is the school's mission to encourage and affirm.