

Saint Mary of the Assumption High School
2018-2019 Elective Course Descriptions

VISUAL AND PERFORMING ARTS

101. Integrated Arts – 2 Credits – Year (T, TH)

This course is limited to ten 11th and 12th grade students who desire to stretch themselves intellectually by exploring self-expression and examining big ideas through visual and performing arts. Participants should anticipate a rigorous combination of imaginative writing exercises, reading activities of varied genres, critical discussion and creative projects. Portfolios will be examined quarterly. The course culminates in the presentation of individual “self-portrait” projects.

102. Canticle – 3.5 Credits – Year (T, TH with announced out-of-school performances)

This school chorus for 10th, 11th and 12th grade students is open without audition, though participants should demonstrate singing ability. Through study and performance, the curriculum explores choral music from a wide variety of time periods and cultures. Students receive instruction in vocal technique and music theory, with individual and ensemble performance opportunities. Students are expected to participate in quarterly performances – for the academic, neighborhood and worship communities – that will, on occasion, occur outside the school day.

103. Fine Arts – 5 Credits - Year

The course introduces students to the elements and principles of art and establishes a foundation for further arts study. Students will sharpen their perceptual skills while learning about the language of art. They will become familiar with sources of inspiration for artists and art history, while creating extensive studio projects covering each of the elements of art. This course will help students to appreciate art history by analyzing and evaluating artworks orally and in writing. Students will also create their own original works of art using a variety of media and art processes.

104. Digital Photography - 5 Credits – Year or 3 Credits – M-W-F

In Digital Photography, students will learn the basics of photographic composition and lighting, the basics of using a digital camera and the basics of preparing a digital darkroom. Students will also learn basic color theory and the fundamentals of image processing. This course is designed for the student who has no background in photography. Student will also examine various aspects of professional photography including the ethics of the profession. The student will also learn more about some of the most respected professional photographers in history and will learn how to critique photographs in order to better understand what creates an eye-catching photograph.

105. Computer Science Discoveries I - 2.5 Credits - Semester

Computer Science Discoveries takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. Students engage with computer science as a medium for creativity, communication, problem solving, and fun. The course inspires students as they build their own websites, apps, games, and physical computing devices.

106. Computer Science Discoveries II - 2.5 Credits – Semester

Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. CS Principles complements CS Discoveries with a deeper focus on concepts such as how the Internet works and the societal impacts of computer science. The course works for beginners and students with experience in our other courses.

107. Digital Art I, II - 2.5 credits per Semester, 5 Credits - Year

The beginning of this course is exploratory. Students learn the elements and principles of design, as well as foundational concepts of visual communication. While surveying a variety of media and art, students use image editing, animation, and digital drawing to put into practice the art principles they've learned. They explore career opportunities in the design, production, display and presentation of digital artwork. They respond to the artwork of others, and learn how to combine artistic elements to create finished pieces that effectively communicate their ideas. In Digital Art II, Students build on the skills and concepts they learned in Digital Arts I as they develop their vocabulary of digital design elements. By the end of the course, students will have created a collection of digital art projects for their digital design portfolio.

108. History of Art I, II - 2.5 credits per Semester, 5 Credits – Year

Students explore the basic elements and principles of art and its role in human history and the development of early cultures. Students look at how art impacted cultures from Paleolithic times to ancient Egypt to the Renaissance, and explore the factors that affect the analysis and interpretation of art. In the second semester, students embark on a journey of discovery examining the artistic endeavors of more recent time periods. Students use art theory to analyze works from ancient Greece and the modern era. Students gain an enhanced understanding of how art is both a reflection and engine of history.

LANGUAGE ARTS

201. **Public Speaking** – 2.5 Credits – Semester

Students are introduced to public speaking as an important component of their academic, work, and social lives. They study public speaking occasions and develop skills as fair and critical listeners, or consumers, of spoken information and persuasion. Students study types of speeches (informative, persuasive, dramatic, and special occasion), read and listen to models of speeches, and prepare and present their own speeches to diverse audiences. Students learn to choose speaking topics and adapt them for specific audiences, to research and support their ideas, and to benefit from listener feedback. They study how to incorporate well-designed visual and multimedia aids in presentations and how to maintain a credible presence in the digital world. Students also learn about the ethics of public speaking and about techniques for managing communication anxiety.

202. **Debate** – 2.5 Credits – Semester

After completing this course, students will have a set of portable argumentation and advocacy skills that they can use in a variety of experiences throughout the curriculum at St. Mary's. Students will initially learn about and practice structured extemporaneous speeches with emphasis on verbal and nonverbal delivery skills (organization, projection, inflection, eye-contact, hand gestures, and more). Students will then build a foundation for effective argumentation and advocacy (claim/warrant/evidence) by participating in "SPAR" debates and ultimately presenting one research-based persuasive speech on the official debate resolution.

203. **Creative Writing** – 2.5 Credits – Semester

Students create original essays, poems, and short stories in this course, which uses the four-step process-writing model. They read professionally written forms of creative writing as models and then integrate their impressions of these works with their personal life experiences as they compose their own writing projects. Students are encouraged to write about topics they find engaging as they practice writing on the following themes: narration, definition, process analysis, cause and effect, and comparison/contrast. After students turn in each assignment, the teacher supplies detailed suggestions for revision. This feedback helps students learn how to improve their self-expression and self-editing skills.

204. College Writing - 2.5 Credits - Semester

The course provides a critical writing and inquiry experience for high achieving high school juniors. Students learn about and practice writing process strategies, particularly the strategies of revision and editing. They receive and learn to respond to feedback on their writing from peers and teachers. Also, students learn how to find, select, evaluate, and incorporate into their writing multiple academic sources. By the end of the course, students acquire rhetorical knowledge, specifically an awareness of how writing changes in response to multiple audiences, purposes, and contexts. The course requires that students practice composing texts in print and electronic environments become a reflective writer.

205. SAT Prep - 2.5 Credits – Semester

This course presents a thorough analysis of SAT verbal and introduces numerous analytic techniques that will help not only on the SAT but in college as well. With this course, students will master punctuation, grammar, and rhetoric, which will help on all sections of the SAT. In addition, they will be able to understand how test writers choose and compose test questions and write top-scoring essays. Features include videos explaining the text, examples, and exercises in step-by-step detail. Students develop the ability to spot places from which questions are likely to be drawn as they read a passage (pivotal words, counter-premises, etc.). They also learn the 400 essential SAT words. Another course emphasis is the comprehensive analysis of the writing task, including writing techniques, punctuation, grammar, rhetoric, and style. The instructor regularly provides hints, insight, and partial solutions to ease students' transition from seeing SAT problems solved to solving them for themselves.

206. Power Plays – 2.5 Credit - Year (Tuesday, Thursday and alternate Fridays)

Limited to ten students, this Read Aloud elective will expose students to fifteen of the world's greatest plays, spanning from ancient Greece to modern America. Participants will improve their reading fluency, unlock creativity, improve self-confidence and strengthen their writing skills. Students and host will explore each play by reading it together aloud and in character. Through comments while reading and written analyses, students will examine the playwright's tools, e.g., dialogue, interior monologue, asides, soliloquies, characterization, plot devices and stage directions. This course's thematic thread will be "Power": in relationships, within self, in diverse contexts such as government, war, social class, religion and race.

207. Harry Potter Colloquy & Writers' Corner – 5 Credits - Year (Read Aloud - Tuesday, Thursday and alternate Fridays; Writing - Monday, Wednesday and alternate Fridays.)

Limited to ten students, HPC is a yearlong, in-character Read Aloud of J.K. Rowling's Potter novels (4,100 pages). The Potter Crew meets with the course host on Tuesday and Thursday and two Fridays a month in Rm. 312 and reads together each of these days after school. In addition, the course includes a one-day marathon read during Christmas and Easter breaks, half-marathon reads on selected holidays, and a celebratory dinner and movie at the conclusion of each novel. The elective also features a college prep writing program team-coached by the host and two distinguished guest teachers, who formerly taught at St. Mary's. The course includes a vocabulary growth plan based on the 1,040,000 words in Rowling's novels.

SOCIAL SCIENCE

301. Physical Geography – 5 Credits - Year

This Geography course will examine a broad range of geographical perspectives covering all of the major regions of the world. Each region will be reviewed in a similar structure in order for students to more clearly see the similarities and differences between each region. Specifically, the course will explore where each region is located along with its physical characteristics, including absolute and relative location, climate, and significant geographical features. The exploration will then continue on to look at each region from a cultural, economic, and political perspective, closely examining the human impact on each region from these perspectives as well as how human activities impact the environments of the region.

302. Political Science – 5 Credits – Year

This course studies the history, organization, and functions of the United States government. Beginning with the Declaration of Independence and continuing through to the present day, students explore the relationship between individual Americans and our governing bodies. Students take a close look at the political culture of our country and gain insight into the challenges faced by citizens, elected government officials, political activists, and others. Students also learn about the roles of political parties, interest groups, the media, and the Supreme Court, and discuss their own views on current political issues.

303. African American History – 2.5 Credits – Semester

This heterogeneous multi-grade level class will examine African American History from the beginning of Slavery through modern times. It will cover major events: Development of Slavery, Atlantic Passage, Slave Life, Slave Rebellion, Abolitionist Movement, Civil War and Reconstruction, Development of Segregation and Jim Crow, Suffrage, The Great Wars, Civil Rights Era, and Current Issues. The course will include a variety of active learning activities such as lecture, debate, and group presentation. Selected reading and research projects will be required.

304. Race Relations – 2.5 Credits – Semester

This course examines the roles that race and cultural identity play in America's pluralistic society. Students learn how our history, mythology, and beliefs have contributed to our sense of who we are as individuals and as a nation. They examine the values that shape their common identity, those that can lead to conflict, and the role of the media as a shaper and reflector of social attitudes. Analysis of the consequences of a range of responses to ethical and moral dilemmas around issues of race, ethnicity, and prejudice, help students make informed decisions about their attitudes and behavior when those dilemmas arise in their lives. Students read primary and secondary sources, conduct interviews, write several short papers, and participate in discussions and simulations.

305. Political Science - 5 Credits - Year (Note: Duplicated in electives brochure)**306. Madness & Power** – 2.5 Credits – Semester

What do Nebuchadnezzar of Ancient Babylon, King George III of England, Ivan the Terrible of Russia, Queen Maria I of Portugal, The Zhengde Emperor of China, and Caligula of Ancient Rome have in common? The people of their time and later historians considered them to be mad. Their insanity took the form of cruelty, perversion, paranoia, phobia and withdrawal from reality. In this semester course, students will travel across time, space and culture to learn about individual rulers and their bizarre behavior and the historical period on which they had an impact.

307. Human Rights – 2.5 Credits – Semester

In this course, we will examine the origins of ideas about human rights as well as those documents, such as the Universal Declaration of Human Rights, that determine contemporary understanding of those rights that assure freedom, dignity and respect for each human being. We will examine United Nations human rights legislation as well as organizations such as Human Rights Watch and Amnesty International, whose work is dedicated to protecting the rights of people around the world. Our work will include case studies and examination of one or more civil and political rights (for example, children's rights, freedom of speech rights, torture and prisoners' rights), and at least one socioeconomic or cultural right (for example water, education or the environment). We may also study genocides of the 20th and 21st centuries in places like Rwanda and Darfur. Reading for the course will include Samantha Power's *A Problem from Hell: America and the Age of Genocide*, as well as material particular to the various case studies and documents that make up the course. Films and outside speakers will augment our study.

308. Holocaust and Film - 2.5 Credits - Semester

This seminar approaches the Nazi persecution of European Jewry from several disciplinary perspectives. First, it explores the topic historically using a variety of historical materials dealing with the history of European anti-Semitism, German history from Bismarck to the accession of Hitler, the evolution of anti-Jewish persecution in the Third Reich, and the history of the Holocaust itself. Texts include primary sources produced by the German government between 1933 and 1945 and by Jewish victims and survivors, documentary films, and secondary interpretations. The aims of this part of the seminar are to give students an understanding of the background and narrative of the Holocaust, to introduce them to the use of primary historical sources, and to familiarize them with some of the major historiographical debates. Students then ponder religious and theological reactions to the Holocaust, using literary and cinematic resources as well as discursive theological ones. They consider the historical question of the role played by the Protestant and Catholic churches and theologies in the Holocaust. The course concludes with an assessment of the role played by the Holocaust in today's world, specifically in the United States.

309. Sociology – 2.5 Credits – Semester

Students explore human relationships in society. Instructional materials emphasize culture, social structure, the individual in society, institutions, and social inequality. Unit topics include society and culture, what is sociology, the nature of culture, conformity and deviance, social structure, roles, relationships and groups, and social stratification. Students also learn about social institutions, the family, religion and education, government and economic systems, the individual in society, the early years, adolescence, the adult years, continuity and change, communities and change, social movements and collective behavior, social problems, minorities and discrimination, poverty, crime, and problems of mass society.

310. History Up Front – 2.5 Credits – Semester

Students analyze governments, economies, peoples, and cultures from around the world in this course. Instruction emphasizes the structures and policies of the United States and how they compare to other systems in the international community. Students apply critical thinking and research skills to examine current events and contemporary issues, including human rights, the strengths and weaknesses of globalization, America's role in the international economy, the severe environmental threats facing many regions around the world today, how religion is often used to facilitate and justify violence, and America's "War on Terror" and its impact on the Middle East and Islamic culture.

MATHEMATICS

401. Calculus – 5 Credits – Year

This course provides a comprehensive survey of differential and integral calculus concepts, including limits, derivative and integral computation, linearization, Riemann sums, the fundamental theorem of calculus, and differential equations. Content is presented in 10 units and covers various applications, including graph analysis, linear motion, average value, area, volume, and growth and decay models. In this course students use an online textbook, which supplements the instruction they receive and provides additional opportunities to practice using the content they've learned. Students will use an embedded graphing calculator for their work on this course.

402. Pre-calculus/Trigonometry – 5 Credits – Year

Pre-calculus weaves together previous study of algebra, geometry, and functions into a preparatory course for calculus. The course focuses on the mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. Topics include linear, quadratic, exponential, logarithmic, radical, polynomial, and rational functions; systems of equations; and conic sections in the first semester. The second semester covers trigonometric ratios and functions; inverse trigonometric functions; applications of trigonometry, including vectors and laws of cosine and sine; polar functions and notation; and arithmetic of complex numbers. Cross-curricular connections are made throughout the course to calculus, art, history, and a variety of other fields related to mathematics.

403. Probability and Statistics - 5 Credits – Semester

Students learn counting methods, probability, descriptive statistics, graphs of data, the normal curve, statistical inference, and linear regression. Proficiency is measured through frequent online and offline assessments, as well as asynchronous discussions. Problem-solving activities provide an opportunity for students to demonstrate their skills in real-world situations.

404. College Math Seminar - 3 Credits - Year (Monday, Wednesday, Friday)

This is a survey course intended for seniors who wish to obtain additional mathematics knowledge. The course provides an introduction of discrete math topics encountered in Liberal Arts college curriculum, such as probability, informal statistics, graph theory, election theory, logic, fair division, and cryptology.

Note: Students in this course would be eligible on Tuesday and Thursday to audit during the same period as College Math Seminar any other five-day-a-week course scheduled that time period or to arrange with that instructor a two-credit independent study.

405. SAT Prep – 2.5 Credits - Semester

All college-bound students will benefit from a thorough review of substantive material and test-taking strategy. This course is appropriate for seniors seeking to improve their test scores, overcome anxiety, and develop confidence and for sophomores and juniors wishing to get a head start. Learner outcomes include:

- * Recognizing the nature and format of the SAT and acquiring the skills needed to master it
- * Demonstrating proven test-taking strategies to maximize performance in each of the exam areas
- * Reviewing basic math, algebra, geometry, vocabulary, reading, and writing skills tested by the SAT
- * Evaluating performance and progress with real SATs and extensive materials for individual study, and
- * Building test-taking confidence and competence to attain the highest possible score.

The textbooks used with this course are the *Redesigned SAT Book of Knowledge* and the *Redesigned SAT Book of Knowledge Student Solutions Manual*. Students should own a TI-83 or TI-84 calculator in order to prepare properly for the SAT.

SCIENCE & TECHNOLOGY**501. Anatomy & Physiology** - 5 Credits - Year

This course is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. The lab provides a hands-on learning experience for exploration of human system components and basic physiology. Systems to be studied include cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics)

502. Environmental Science – 5 Credits, Year

This course surveys key topic areas including the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment. Students explore actual case studies and conduct five hands-on, unit-long research activities, learning that political and private decisions about the environment and the use of resources require accurate application of scientific processes, including proper data collection and responsible conclusions.

HEALTH

601. **First Aid** - 2.5 Credits – Semester

This First Aid, Health and Safety course is designed to provide an overview of first aid and the best practices for many first aid situations. The skills taught in this course do not replace professional medical help but offer guidelines and techniques for temporary assistance until advanced medical help arrives. Course topics include: Before Giving Care, Breathing Emergencies, Sudden Illness, Environmental Emergencies, Soft Tissue Injuries, Injuries to Muscles and Bones, and Health and Safety in Sports.

602. **Physical Development** – 2.5 Credits – Semester

This course will explore the dynamic factors affecting the health and wellbeing of young people around the world. In this course we will take a holistic view of youth health and wellbeing. We will explore changing patterns of adolescent health and development, including why adolescence is starting earlier and ending later; how puberty and adolescent brain development may shape future health; and how what happens in adolescence can affect the start to life for the next generation. We'll also look at the major health and social issues affecting young people and ways of addressing these through policy, practice and programming. By the end of this course, the students will be able to: Describe normal growth and development of adolescents from the standpoint of physiological, psychological, social, and emotional development; describe the characteristics of early, middle, and late adolescence, describe the resilience among adolescents, and understand risk-taking behaviors in adolescence and specifically how to prevent these behaviors.

603. **Human Development** – 2.5 Credits – Semester

Human Growth and Development is an examination of human development across the lifespan with emphasis upon research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. During this course the students will:

- Understand historical, theoretical, and research perspectives of Human Growth and Development
- Understand the importance of prenatal care in the development of a child
- Understand the development of children ages newborn through two years
- Understand the development of children ages three through five years
- Understand the development of children ages six through ten years
- Understand the development of adolescents, ages 11 through 19 years
- Understand the importance of care and protection of children
- Understand the development of adults, ages 20 through 39 years
- Understand the development of adults, ages 40 through 65 years
- Understand the development of adults ages 66 years and older.

604. **Health** – 2.5 Credits - Semester

The goal of Health Education is to help students become lifelong learners who can apply what they have learned to make informed, educated decisions that facilitate personal, family, and community health and safety. This course provides the student with the opportunities to consider many influences on social, emotional, and physical health and well-being. The course covers information on healthy decisions, communication, goal setting and decision making, family dynamics, food and nutrition, substance abuse prevention, and prevention of STIs and HIV/AIDS. Additional topics include relationship management, stress management and how to be a savvy consumer.

605. Yoga and Tai Chi - 2.5 Credits – Semester (alternating days)

This course is designed to introduce students, safely and accessibly, to the basic postures, breathing techniques, and relaxation methods of yoga. Students will begin to experience the benefits of stretching, moving, and breathing freely as they relieve built up stress, learn to relax, increase their ability to focus, and ultimately get more out of day-to-day life. The aim of this course is to promote vibrant health and to tap the body's latent energy reserves.

Tai chi is often described as "meditation in motion," but it might well be called "*meditation* in motion." There is growing evidence that this mind-body practice, which originated in China as a martial art, has value in treating or preventing many health problems. In this low-impact, slow-motion exercise, you go without pausing through a series of motions named for animal actions — for example, "white crane spreads its wings" — or martial arts moves, such as "box both ears." As you move, you breathe deeply and naturally, focusing your attention on bodily sensations. The movements are usually circular and never forced, the muscles are relaxed rather than tensed, the joints are not fully extended or bent, and connective tissues are not stretched.

606. Global Ethics – 2.5 Credits – Semester

Terrorism, wars, genocide, refugee crises, economic disparities, economic exploitation, propaganda including "fake news," drug resistant pathogens, natural disasters, global warming, and so on — what kind of world do we live in? What kind of world ought we live in? How can we move from what is to what ought to be our world? These are the basic questions of global ethics. With consideration for a range of ethical theories, students study current global events in order to better understand why the world is the way that it is and what can be done about it. The course includes readings in anthropology, sociology, political theory, philosophy and the sciences, and it makes use of current news sources, investigative journalism, documentary and feature films, and new media. The course culminates with student projects on any topic concerning the world as it is and might be — or what we can do to make it better.

607. Imagine Your Future - 2.5 Credits – Semester

Can one's life be designed or planned out ahead of time? More often than not, life is not linear, but probably not totally random either. Utilizing the methods of "design thinking" this course will assist students in reflecting on how their lives might unfold, what choices they face in the future — in college and afterward — and how they might navigate those choices. What does it mean to come to "know thyself?" Before one "discovers one's passion," how does one determine one's interests? What is the difference between "finding a job" and "discovering one's calling" or vocation? What is "meaningful work?" What is a fulfilling life, and how does that affect one's personal and professional interests? Through a series of exercises and readings, the students will have the opportunity to follow a process of self-discernment, addressing the fundamental questions of "Who am I?" and "Where am I going in life?" Group creativity exercises, drafting a failure résumé, sketching out several "Odyssey Plans" and writing personal reflection papers are part of the course.

608. Psychology – 5 Credits - Year or 3 Credits – M-W-F

This course focuses on individual behavior and why an individual thinks, feels, and reacts to certain stimuli. Major emphases will be placed on research methods, stages in childhood and adolescence, how the brain works, altered states of consciousness, psychological testing, and psychological disorders. This college prep course requires advanced reading and critical thinking skills

