Academic Guide<br>School Year 2024-2025<br>Welcome Video from Faculty

St. John's Northwestern is dedicated to the individual preparation of its students for success in college and in life. The combination of smaller classes, access to teachers on a one-to-one basis, experienced faculty, and rigorous courses create a learning environment that is both structured and nurturing. It is our mission to facilitate academic curiosity, intellectual growth and scholastic success for each student. The middle school is for students in grades 6,7 , and 8 . The high school program is for students in grades 9 through 12.

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## General Information

## Grading and Credits

The academic year is divided into two semesters; a semester is divided into two quarters. Only the semester grade shows on the student's official transcript of academic record. Most courses are worth one-half credit per semester. Semester grades are calculated as follows:

## Middle School Courses:

Quarter Grade (50\%) + Quarter Grade (50\%) = Semester Grade

## High School Courses:

Quarter Grade (40\%) + Quarter Grade (40\%) + Semester Exam Score (20\%)
= Semester Grade
Grade points are utilized in the computation of grade point average (GPA) according to the applicable grade scale shown here. Weighted GPA shows on the transcript.

## Scheduling

Students select year-long or semester classes to fill seven class periods. We work hard to give students all requested courses; however, scheduling conflicts may arise in which a student may need to select another course. Only necessary schedule changes are considered after the semester starts.

## Accreditation and Memberships

- Independent Schools Association of the Central States (accreditation)
- National Association of Independent Schools
- Association of Military Schools \& Colleges of the United States
- The College Board

| Standard Grade Scale |  |  |
| :---: | :---: | :---: |
| Percent | Letter | Grade Points |
| 93-100 | A | 4.0 |
| 90-92 | A- | 3.7 |
| 87-89 | B+ | 3.3 |
| 83-86 | B | 3.0 |
| 80-82 | B- | 2.7 |
| 77-79 | C+ | 2.3 |
| 73-76 | C | 2.0 |
| 70-72 | C- | 1.7 |
| 67-69 | D+ | 1.3 |
| 63-66 | D | 1.0 |
| 60-62 | D- | 0.7 |
| 59/Below | F | 0 |


| Honors/AP/College <br> Level Grade Scale |  |  |
| :---: | :---: | :---: |
| Percent | Letter | Grade <br> Points |
| $93-100$ | A+ | 5.0 |
| $90-92$ | A | 4.7 |
| $87-89$ | A- | 4.3 |
| $83-86$ | B+ | 4.0 |
| $80-82$ | B | 3.7 |
| $77-79$ | B- | 3.3 |
| $73-76$ | C+ | 3.0 |
| $70-72$ | C | 2.7 |
| $67-69$ | C- | 2.3 |
| $63-66$ | D+ | 2.0 |
| $60-62$ | D | 1.7 |
| $59 / B e l o w$ | F | 0 |

## HIGH SCHOOL, Grades 9-12

## Credit and GPA Transfer Policy

The credit and GPA transfer will follow as closely as possible the credits and grades earned at a student's previous high school. We accept the weighted GPA from other schools with a limit of 1.0 weighted score for Honors and Advanced Placement classes and the normal increase for accelerated classes. If a grade scale is not provided by the previous school, grades will be calculated according to SJN's grade scale.

## International Students

International students are assessed at the beginning of the term and placed in courses accordingly. Students may need to complete a rigorous ESL learning program before entering into mainstream courses. Graduation requirements may be adjusted based upon a student's English proficiency.

Honors Courses increase rigor while providing a robust, in-depth learning experience. To enroll in an honors class, students must meet all prerequisites and receive instructor approval, including earning a minimum of a $90 \%$ in a previous standard-scale course. If a student's grade is not maintained at a minimum of $85 \%$ while enrolled in an honors course, the student will be under review and may be transferred out of honors and into a standard equivalent.

Advanced Placement (AP) courses are full-year honors courses; The goal of AP coursework is to earn a minimum score of a 3 on the annual AP Exam to potentially earn college credit for that course. Students should verify with each college of choice regarding the acceptance of AP scores and minimum requirements. Students desiring to take AP courses must meet all prerequisites and receive approval from the academic department. Students enrolling in an AP course are required to complete the AP Exam at the end of second semester. Test fees apply.

AP courses for $\mathbf{2 0 2 4 - 2 0 2 5}$ school year*
AP Language \& Composition ( 1.0 cr .)
AP World History ( 1.0 cr .)
AP Seminar ( 1.0 cr .)
AP Human Geography $(1.0 \mathrm{cr}$.)
AP Psychology $(1.0 \mathrm{cr})$
AP Physics 1.0 cr each $)$
AP Chemistry $(1.0 \mathrm{cr}$.)
AP Computer Science ( 1.0 cr .)
AP Calculus AB ( 1.0 cr )
*Subject to change based on enrollment

Dual credit college courses are semester courses that allow students to earn both high school credit ( 0.5 cr./semester) and college credit (credits vary). Students who successfully complete the course will receive college credit from our partner university. Some college courses require students to qualify through a placement exam (ie. Math and English). All college courses are taught by university-certified instructors and may take place on or off the SJNA campus. An extra fee per college credit hour will be charged to the student's account and is based on university tuition rates. High school transcripts reflect courses as dual credit but only show high school credit. Transcripts reflecting college credit are available through the hosting university. Students taking college level courses must have all prerequisites met and be approved by the academic department.

|  | College Courses for 2024-2025 school year* |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: |
| High School | College |  |  |  |  |  |
| Semester 1 | 0.5 | 3.0 | Comester 2 | College Composition | High School <br> Credit | College <br> Credit |
| College Communication | 0.5 | 3.0 | US History Since 1865 | 0.5 | 3.0 |  |
| US History to 1865 | 0.5 | 3.0 | Modern Civilizations (1815-present) | 0.5 | 3.0 |  |
| Early Modern Civilizations (1500-1815) | 0.5 | 3.0 | Financial Literacy | 0.5 | 3.0 |  |
| Introduction to Business | 0.5 | 3.0 | Essentials of Financial Accounting | 0.5 | 3.0 |  |
| General Economics | 0.5 | 3.0 | College Statistics | 3.0 |  |  |
| College Algebra | 1.0 | 4.0 |  | 0.5 | 3.0 |  |
| College Biology (full year) | 4.0 |  | $*$ Subject to change based on enrollment |  |  |  |
| College Environmental Science (full year) | 1.0 |  |  |  |  |  |

## High School Graduation Requirements

To graduate from St. John's Northwestern a minimum of 24 total credits are required. Of the total credits, some academic departments require a specific number of credits and courses as a minimum. Two honors diplomas are offered for students desiring to follow a higher learning track: STEM Honors and Humanities Honors. These options have additional graduation requirements per the chart below. Electives are credits or courses taken by choice beyond the minimum course and department requirements regardless of the department in which they are earned.

| Graduation Requirements |  |  |  |
| :---: | :---: | :---: | :---: |
| Department | COLLEGE PREP DIPLOMA <br> 24 total credits <br> 2.0 cumulative GPA | STEM HONORS DIPLOMA 25 total credits <br> 3.0 cumulative GPA | HUMANITIES HONORS DIPLOMA <br> 25 total credits <br> 3.0 cumulative GPA |
| ENGLISH | 4.0 credits | 4.0 credits | 4.0 credits, 2.0 cr . honors level |
| MATHEMATICS | 3.0 credits Courses: Geometry; Algebra 2 | 4.0 credits, 2.0 cr . honors level Courses: Trig/Pre-Calc Hnrs or Calculus | 3.0 credits Courses: Geometry; Algebra 2 |
| SOCIAL STUDIES | 3.0 credits <br> Courses: U.S. History | 3.0 credits Courses: U.S. History | 4.0 credits, 2.0 cr . honors level Courses: U.S. History |
| SCIENCE | 3.0 credits <br> Courses: Biology; Chem. or Physics | 4.0 credits, 2.0 cr. honors level Courses: Biology; Chem. or Physics | 3.0 credits <br> Courses: Biology; Chem. or Physics |
| WORLD LANGUAGES | 2.0 credits, same language | 2.0 credits, same language | 3.0 credits, same language |
| PHYSICAL EDUCATION | 1.5 credits Courses: Health | 1.5 credits Courses: Health | 1.5 credits Courses: Health |
| LEADERSHIP | 1.0 credits | 1.0 credits | 1.0 credits |
| TECHNOLOGY | 1.0 credit | 2.0 credits | 1.0 credit |
| FINE ART | 1.0 credits | 1.0 credits | 1.0 credits |
| COLLEGE \& CAREER PLN | 0.5 credit | 0.5 credit | 0.5 credit |
| PERSONAL FINANCE** | 0.5 credit | 0.5 credit | 0.5 credit |

English/World Language requirements for international students may differ based upon language proficiency and will be determined by the Academic Office
**Requirement starting with Class 2028

## Course Requirements and Offerings

Full-year courses (unshaded in tables below) earn 1.0 credits. Students taking full-year courses are expected to remain in the course the entire year. Semester courses (shaded in tables below) earn 0.5 credit; these courses are offered either 1 st or 2 nd semester or both semesters as indicated in the following tables. Course offerings and schedule are subject to change. Exceptions to requirements or grade levels are approved through the Academic Office. See course descriptions for all course prerequisites.

| ENGLISH |  |  |
| :---: | :---: | :---: |
| Requirements: 4.0 department credits <br> Humanities Diploma Requirements: 4.0 department credits, 2 at honors level |  |  |
| $9^{\text {th }}$ Grade | English 9 (1.0 cr.) or English 9 Honors (1.0 cr.) |  |
| $10^{\text {th }}$ Grade | English 10 (1.0 cr.) or AP Seminar (1.0 cr.) |  |
| 11th Grade | Sem. 1 | Sem. 2 |
|  | Forensics \& Public Speaking (0.5 cr) | Forensics \& Public Speaking (0.5 cr) |
|  | English 11 (1.0 cr.) |  |
|  | AP Language \& Composition (1.0 cr.) |  |
| 12th Grade | Sem. 1 | Sem. 2 |
|  | College Communication (0.5 cr.) | College Composition ( 0.5 cr .) |
|  | Forensics \& Public Speaking ( 0.5 cr English elective) | Forensics \& Public Speaking ( 0.5 cr English elective) |
|  | English 12 (1.0 cr.) |  |

## Course Descriptions

ENGLISH 9 This course provides a better understanding of English grammar, sentence structure, paragraph structure and essay structure. This course also concentrates on vocabulary skills while building on higher level reading comprehension. Students are introduced to general vocabulary as well as literary terminology. Students assimilate this knowledge in a working context. English 9 focuses on writing mechanics and an introduction to literature.

ENGLISH 9 HONORS This course is for the student who has previously demonstrated excellence in vocabulary development, reading
(English 9 Equivalent)
Length: 2 sem. Maintain 3.0 course GPA
comprehension and written self-expression. Students are expected to read, analyze, and write at an accelerated pace. This is a genre-driven course of poetry, short stories (fiction and nonfiction) and novels as well as drama to include a Shakespearean selection. The student's response to literary assignments drives the majority of one's writing. Students study the historical background of a writer and literary piece to help place context on a variety of themes and criticism. Essay construction is taught as a writing process to provide students with a structure for idea placement. Emphasized is thesis-support essays of mechanical cleanliness and accurate grammatical structure of writing. Additionally, students regularly engage in college-bound vocabulary development and practice.

ENGLISH 10 A course designed to further develop student reading, writing and oral presentation skills. Emphasis is placed upon basic and intermediate composition using rhetorical writing devices: the narrative, descriptive, persuasive, comparison and contrast and expository essays. Analysis of short stories using the elements of a short story; appreciation and analysis of drama using one Shakespearean play; introduction to the formal research paper using the MLA format--and development of that topic into a 7-10 minute oral presentation in front of the class; and appreciation and analysis of poetry (to include narrative, dramatic and lyric poetry) are additional requirements. At least two novels are also read, examined and analyzed.


#### Abstract

AP SEMINAR AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the (English 10 Honors Equivalent)

Length: 2 sem Maintain 3.0 course GPA complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.


ENGLISH 11 English 11 students will read, respond to, and reflect upon literary and informational texts as they explore facets of Length: 2 sem. the American identity through an intensive study of short stories, essays, and novels. They will analyze the literature through the perspective of the historical significance, exploring the relationship between American writing and ideas of the past and ideas and philosophies of the present. Students are expected to read actively and think critically to absorb a work, responding in expository and analytical essays. Thematic selections include novels, short stories, poems, biographies, critical commentaries, films, and other media. Additional focus areas include comprehension strategies, grammar study, and impromptu writing. Students' understanding of each unit's content and skills will be measured through formative and summative assessments.

ENGLISH 12 In English 12, students continue to refine their reading, writing, speaking, listening, and language skills developed in Length: 2 sem. English 11. With a focus on World and Modern literature, students examine and evaluate various perspectives concerning individual, community, national, and world issues. Emphasis will be placed on the worldview, encouraging students to understand that local and national issues often have an international impact. Through whole-class language experiences, students will build up their background knowledge and academic discourse around multiple themes and texts. This course will also prepare seniors for their Senior Speech requirement and lessons on public speaking and oral communication will be interwoven throughout the year.

AP LANGUAGE \& The AP English Language and Composition course focuses on the development and revision of evidence-based COMPOSITION analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they Length: 2 sem. compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they PREQ: English 9 and 10 read and analyze rhetorical elements and their effects in nonfiction texts-including images as forms of text-from a Instructor consent range of disciplines and historical periods.
Min. 3.0 cum. GPA.
FORENSICS \& This elective English course is designed to help students research, form and support arguments, develop PUBLIC SPEAKING speechwriting, practice inflection, and increase oratory and performance skills needed in popular career fields such Length: 1 sem. as lawyers, politicians, marketing and sales, performers, professional athletes, educators, and more. Students will gain experience in improving speaking skills in front of an audience and build basic communication skills like eye contact, articulation, and poise so they are able to present themselves in the best light. Students will engage in persuasive and informative speaking, individual and duet acting, press conferences, debate activities, and more.

## DUAL CREDIT (High School and College Credit) Additional fee.

COLLEGE COMPOSITION
Length: 1 sem.
This course provides study and practice in rhetoric and essay writing, emphasizing writing as a process of invention, drafting, revising and editing. Students will practice writing in following genres: personal reflective essay, compare and contrast essay, research paper, rhetorical analysis paper, persuasive call-to- action/debate speech. The main goal of the course is to encourage good writing habits for life, both inside and outside the classroom. Effective reading strategies and critical thinking skills are also key components of the course. Students can choose whether to enroll in the class for college credit. Additional fees apply.

COLLEGE This course introduces the basic concepts of human communication in relation to personal branding with special COMMUNICATION emphasis on adapting to diverse cultural audiences. The course includes practice in Informative Speaking, Critical Length: 1 sem. Listening/Evaluation of Persuasive Messages, Interpersonal Communication, and Digital Communication. Creating a PREQ: English 9 and 10 personal brand is meant to influence perceptions of others about one's credibility and expertise. Through Instructor consent communication, people create impressions about their competencies and achievements in order to have an impact Min. 3.0 cum. GPA on others. Students can choose whether to enroll in the class for college credit. Additional fees apply.

## ENGLISH AS SECOND LANGUAGE

Requirements: New international students are given a variety of English language proficiency assessments upon entering SJN. Students not meeting the minimum English proficiency requirements, as determined by the academic department, are required to take one or more ESL courses until the minimum requirement is met. Student schedules will vary in level as well as the number of required courses per individual proficiency level. Students are assessed regularly and are eligible to advance to the next level at every academic semester.

|  | Sem. 1 | Sem. 2 |
| :---: | :---: | :---: |
|  | ESL HS Beginning Literacy 1 | ESL HS Beginning Literacy 2 |
|  | ESL HS Intermediate Literacy 1 | ESL HS Intermediate Literacy 2 |
|  | HS American Literature for ESL | HS American Literature for ESL 2 |
|  | ESL Study Lab | ESL Study Lab |

## Course Descriptions

HS BEGINNING LITERACY This is an ESL literacy course for all new international students in high school entering SJNA and testing at the Length: 1-2 sem. Entering ( Level 1) \& Emerging ( Level 2) of the WIDA Consortium English Language Proficiency Standards. New international students enrolled in this course may be at the early stages of literacy and/or had little exposure to understanding the written language of English. The focus of this course is to expose ESL students to different academic texts, build reading strategies, academic English vocabulary, grammar and writing at the entering and emerging levels. The course is built on thematic units promoting 21st century academic skills by teaching key reading skills, grammar for writing, higher order thinking skills and a wide range of general and academic vocabulary preparing students for college classrooms.

HS INTERMEDIATE This is an ESL literacy course for all new international students in middle school entering SJNA and testing at the
LITERACY Developing (Level 3) \& Expanding (Level 4) of the WIDA Consortium English Language Proficiency Standards. New Length: 1-2 sem international students enrolled in this course may have already developed foundational grammar, good writing and reading skills and had some exposure to understanding the written language of English. The focus of this course is to expose ESL students to different academic texts, strengthen reading strategies, improve academic English vocabulary, grammar and writing at the developing and expanding levels. Additionally, another goal of this course is to introduce and develop ACT test taking skills by completing ACT reading and writing practice tests. The course is built on thematic units promoting 21 st century academic skills by teaching key reading skills, grammar for writing, higher order thinking skills and a wide range of general and academic vocabulary preparing students for college classrooms.

ESL STUDY LAB This study period is scheduled during the academic day and is designed for students to get individualized additional Length: 1-2 sem. support in all academic classes. This class specifically supports ESL students at proficiency levels 1-3.

AMERICAN LITERATURE This ESL literature course is designed to model our college preparatory American Literature course with the
FOR ESL appropriate level of scaffolding and support in order to begin the transition to appropriate grade level English
Length: 1 sem. courses. Students in this course experience an intensive study of literature from Native Americans, European
Instructor Approval Req'd explorers, early Revolutionary writers to the Romantic. Students can expect to read and write in response to poetry, drama, novels, essays, and short stories. It is expected that students think critically and communicate their ideas through oral and writing assignments that expose and analyze writers' intents and purposes. Approval for this course will be based on a student's WIDA proficiency level.

| MATHEMATICS |  |  |
| :---: | :---: | :---: |
| Math Requirements: 3.0 department credits; Courses: Algebra I (or equivalent)Geometry, Algebra 2 (or equivalents); <br> STEM Diploma Requirements: 4.0 department credits, 2.0 credits at honors level; Courses: Trigonometry/Pre-Calculus Honors OR <br> Calculus/Stats |  |  |
| $9^{\text {th }}$ Grade | Foundations of Algebra ( 0.5 cr . per semester) |  |
|  | Algebra 1 (1.0 cr.) or Accelerated Algebra 1 (1.0 cr.) |  |
|  | Geometry ( 1.0 cr .) or Geometry Hnrs (1.0 cr.) if Algebra 1 taken in 8th grade |  |
| $10^{\text {th }}$ Grade | Geometry (1.0 cr.) or Geometry Honors (1.0 cr.) |  |
|  | Algebra 2 (1.0 cr.) or Algebra 2 Honors (1.0 cr.) |  |
| $11^{\text {th }} / 12^{\text {th }}$ Grade |  | Sem. 2 |
|  | College Algebra ( 0.5 cr .)* | College Statistics (0.5 cr.)* |
|  | Algebra 2 (1.0 cr.) or Algebra 2 Honors (1.0 cr.) |  |
|  | Trigonometry/Pre-Calculus (1.0 cr.) or Trigonometry/Pre-Calculus Honors (1.0 cr.) |  |
|  | AP Calculus AB (1.0 cr.) |  |

## Course Descriptions

FOUNDATIONS OF Foundations of Algebra is designed for students who are not yet ready for Algebra 1 and are recommended for
ALGEBRA additional learning support at the high school level. The Foundations of Algebra curriculum targets the key concepts of
Length: 1 or 2 sem. algebraic thinking, place value, computational fluency, concepts of fractions, measurement, and data. Students will earn
PREQ: Teacher an elective pass/fail credit for each semester of the course and significant support for success in the Algebra course. recommendation

ALGEBRA 1 This first year algebra course includes work with numerical expressions. It also covers axioms, inequalities, absolute Length: 2 sem. values, word problems, functions, graphing, linear equations, systems, exponents, radicals, and operations with polynomials, factoring, and an introduction to quadratic equations. Computer usage will be directed towards analysis of functions, graphs and systems of equations.

ACCELERATED This accelerated course introduces students to linear, exponential, and quadratic functions by interpreting, analyzing,
ALGEBRA 1 comparing, and contrasting functions that are represented numerically, tabularly, graphically, and algebraically. The Length: 2 sem. course builds upon the basic concepts of functions to include transformations of linear and nonlinear functions. Students deepen their understanding of quantitative reasoning, piecewise functions, and quadratic functions through performance tasks. The additional performance-based skills allow the honors students to apply more of the concepts taught in the course.

GEOMETRY The major goals of geometry are to acquaint students with the structure of geometry as a mathematical system and to Length: 2 sem. develop the student's ability to do abstract logical reasoning. This is a basic course in Euclidean plane geometry, with PREQ: Alg. 1 deductive reasoning and proofs. Solid geometry, area, volume, and surface area of various figures are studied. The basic principles of trigonometry are covered in this course. Computer use will be directed towards the development and strengthening of student comprehension in the above areas through the tutorial and project based software included with the text.

GEOMETRY HONORS This course is designed to be a challenging alternative to the regular Geometry course for those students who had a Length: 2 sem. B+or better average in their first year algebra course. Students interested in taking the course should have a strong PREQ: Alg. , instructor interest in math. Topics covered in the class will include, but are not limited to: deductive reasoning and proofs, solid consent geometry, area, volume and trigonometry. Each of these topics will be explored through theory and application. Projects involving research, analysis and writing skills will be used to include a cross curricular approach.

ALGEBRA 2 This second year algebra course reviews Algebra 1 topics in more depth and covers complex numbers, rational Length: 2 sem. exponents, conic sections, exponential functions, and systems of equations. Also included are set theory and Venn PREQ: Alg. 1 diagrams. Computer usage will be directed towards the exploration of conic sections, exponential functions and tutorials for students.

ALGEBRA 2 HONORS This is a second year course in the Algebra sequence and is designed to be an alternative to regular Algebra II course
Length: 2 sem for those students who achieved a B+ or better average in Algebra I. Students interested in this course should have a
PREQ: Alg. 1, instructor strong interest in math and have a solid background. Topics covered in this course will cover but are not limited to: a
consent more in-depth review of Algebra I concepts, rational expressions, matrices, irrational and complex numbers, analytic geometry, solving quadratics and trigonometry concepts.

TRIGONOMETRY/ PRECALCULUS
Length: 2 sem. PREQ: Alg. 2

TRIGONOMETRY /PRECALCULUS HONORS
Length: 2 sem. PREQ: Alg. 2, instructor consent
AP CALCULUS AB
Length: 2 sem. PREQ: Trig/Pre Calc., instructor consent

Completing the algebra/geometry sequence, this course reviews algebra topics, with an in-depth study of functions (exponential, logarithmic, polynomial, circular, and transcendental). Graphing techniques, sequences, probability, introductory calculus, and analytical geometry are included. Computer usage will involve analysis of trigonometric functions, statistics and probability. Also the use of graphing utilities will be used throughout.

Completing the algebra/geometry sequence, this course reviews algebra topics, with an in-depth study of functions (exponential, logarithmic, polynomial, circular, and transcendental). Graphing techniques, sequences, probability, introductory calculus, and analytical geometry are included. Computer usage will involve analysis of trigonometric functions, statistics and probability. Also the use of graphing utilities will be used throughout. Course will cover topics more in-depth than the standard course.

AP Calculus AB focuses on students' understanding of calculus concepts and provides experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), each course becomes a cohesive whole, rather than a collection of unrelated topics. This course requires students to use definitions and theorems to build arguments and justify conclusions and features a multi-representational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Students should regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

## DUAL CREDIT (High School and College Credit) Additional fee.

$$
\begin{aligned}
& \text { COLLEGE STATISTICS } \\
& \text { Lenis course provides a fourth year of mathematics for students not pursuing trig/pre-calculus or calculus. Students can } \\
& \text { PREQ: Alg. } 2, \text { Geom. } \\
& \text { inferential statistics for students who have a need for quantitative methods. Topics covered are presentation of data in } \\
& \text { Placement test req. } \\
& \text { table and graphic forms, measures of central tendency and dispersion, elementary probability theory, confidence } \\
& \text { intervals and hypothesis testing, regression and correlation theory, Chi-Square usage, analysis of variance and } \\
& \text { nonparametric methods. Additional fees apply. }
\end{aligned}
$$

COLLEGE ALGEBRA This course provides a fourth year of mathematics for students not pursuing trig/pre-calculus or calculus. Students can Length: 1 sem; choose whether to enroll in the class for college credit. Course topics include: Function concepts: polynomial , PREQ: Alg. 2 rational,exponential, and logarithmic functions.Other topics are systems of equations, matrices and determinants, Placement test req sequences and series, analytic geometry and conic sections, and mathematical induction. Additional fees apply.

| SOCIAL STUDIES |  |  |
| :---: | :---: | :---: |
| Requirements: 3.0 department credits; Courses: US History or equivalent Humanities Diploma: 4.0 total credits, 2.0 credits at honors level |  |  |
| $9^{\text {th }}$ Grade | World History (1.0 cr.) |  |
|  | AP World History (1.0 cr.) |  |
| 10 ${ }^{\text {th }}$ Grade | Sem. 1 | Sem. 2 |
|  | Comparative Cultures \& Governments ( 1.0 cr .) |  |
|  | AP Human Geography (1.0 cr. ) |  |
| $11^{\text {th }}$ Grade | Sem. 1 | Sem. 2 |
|  | College US History 101 (0.5 cr.) | College US History 102 (0.5 cr.) |
|  | US History (1.0 cr.) |  |
| $11^{\text {th }} / 12^{\text {th }}$ Grade | Sem. 1 | Sem. 2 |
|  | History of Christianity ( 0.5 cr .) | Introduction of Early Anglicanism (0.5 cr.) |
|  | College Early Modern Civilizations 1500-1815 ( 0.5 cr )* | College Modern Civilizations 1815 - Present ( 0.5 cr .)* |
|  | College US History 101 ( 0.5 cr .) | College US History 102 ( 0.5 cr .) |
|  | American Government ( 0.5 cr .) | American Government ( 0.5 cr .) |
|  | US History (1.0 cr.) |  |
|  | Introduction to Pre-Law Studies (1.0 cr.) |  |
|  | 20th Century History Honors (1.0 cr.) |  |
|  | AP Psychology (1.0 cr.) |  |

## Course Descriptions

WORLD HISTORY Classroom material is focused more on Western Civilization, although other influences are discussed as they relate to Length: 2 sem. Western Europe. Course material is presented primarily through lecture and text readings. Two to three related commercial movies are shown throughout the year, with a printed worksheet and test follow up, as well as additional handouts from other sources. Essay and analytical skills are stressed throughout the year by quizzes and tests relying heavily on short answers and essay format.

AP WORLD HISTORY AP World History is designed to be the equivalent of a two-semester introductory college or university world history Length: 2 sem. course. In AP World History students investigate significant events, individuals, developments, and processes in six PREQ: Instructor consent historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

[^0]COMPARATIVE This course provides students with the skills and knowledge to deeply engage with contemporary global issues.
CULTURES \& Because of its interdisciplinary nature, this course covers a wide range of topics, including world religions, cultures,
GOVERNMENTS governments, international relations, and more. This course provides invaluable opportunities for students to build
Length: 2 sem. skills and capacities to explore complex, global problems and opportunities from multiple, critical perspectives. Students will become more adept at understanding global issues and solutions, and navigating diverse perspectives.
U.S. HISTORY A general survey course that concentrates on economic, social, political and military American history. The course Length: 2 sem. begins in Colonial America and ends in the 1960's. Special focus is given to the Civil War, World War II and the Cold War. Course material is presented through lecture, textbook readings, primary sources, and handouts. Students are expected to enhance their critical thinking skills.

AMERICAN A senior-level survey course to provide students with a basic understanding of American government principles and the GOVERNMENT functions of a representative democracy. Discussions encompass the nature of the Legislative, Executive, and Judicial Length: 1 sem. branches. Special attention is given to the value of citizenship and the relationship between personal values and our government. Students use a variety of sources; charts, illustrations, readings, and the internet. These materials, used in learning activities, help students understand the relationship between government and the citizen.

20TH CENTURY This course examines the development of the United States during the twentieth century and focuses on events which HISTORY HONORS led America to become a world superpower. Emphasis is placed on understanding world events from different Length: 2 sem. perspectives. Social, political, cultural and military history are taught throughout the year. Students are expected to PREQ: Instructor improve their study and critical thinking skills through reading, taking notes, and writing descriptive essays. Students consent explore the foundations of St. John's Northwestern and explore through research leaders that influenced our school. In addition, students study how America's foreign policy transformed during the first half of the 20th Century. Key topics include Theodore Roosevelt, World War I, Hitler's rise to power. Second semester students study World War II, the Cold War, the 1960's and Vietnam, and the War on Terror.

INTRODUCTION TO This course will cover a broad range of humanities within the social sciences that Pre-Law majors engage with while in
PRE-LAW STUDIES college. Along with procedural changes, critical legal cases, research studies and policy initiatives, students will also
Length: 2 sem. engage with philosophy, political science, criminal justice, and art history. This course emphasizes understanding of civic engagement, political institutions, and the mechanisms that drive decision-making at local, national, and global levels. Students will be able to understand, promote and debate political arguments, strengthen their written and oral communication skills, and engage in high levels of critical thinking.

AP PSYCHOLOGY The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental Length: 2 sem. processes. While considering the studies that have shaped the field, students explore and apply psychological theories, PREQ: Instructor key concepts, and phenomena associated with major units of study, including biological bases of behavior, cognition, consent development, learning, social psychology, personality, and mental and physical health. Throughout the course, students apply psychological concepts and employ psychological research methods and data interpretation to evaluate claims, consider evidence, and effectively communicate ideas. The AP Psychology course is equivalent to an introductory college-level psychology course.

HISTORY OF This course will explore the history of the Christian Church from the Resurrection of Christ to the present. Special CHRISTIANITY emphasis will be placed on the early Christian Church, the development and importance of the Catholic Creeds, and the Length: 1 sem. first one thousand years of expansion outward from Jerusalem and into Asia, Africa, and Europe. The context of the split between the Western and Eastern Churches will be discussed, as well as theological developments and controversies of the medieval era. Major events and personalities of the Protestant Reformation and the Roman Counter Reformation will be studied. This course will also seek to cover the rise of various Christian denominations as well as non-denominationalism within the United States. This course will function primarily as a survey of the history of the Christian Church equipping the student with a broad base of knowledge.

INTRODUCTION TO This course will explore the history and development of Anglicanism beginning with the arrival of the Christian faith to EARLY ANGLICANISM the British Isles. The history of the Christian faith in England will be covered through the time of Henry VIII. Attention Length: 1 sem. will be paid to the development of Anglicanism within England, as well as its spread throughout the world. The development and history of American Anglicanism will be covered from the colonial era through the present. Important theologians and movements within Anglicanism will be discussed, including important persons, both English and American, as well as the Anglo-Catholic movement so important to the founding of St. John's Hall and ultimately St. John's Northwestern Academies. A field trip to the United Kingdom to explore and present on important locations may be a possibility for this course.

## DUAL CREDIT (High School and College Credit) Additional fee.

EARLY MODERN This college world history course covers the history of the development of nation states from the time of the late CIVILIZATIONS Renaissance to the end of the Napoleonic Era (1511-1815). Special emphasis is given to the Western world, though all Length: 1 sem. regions are covered. 0.5 high school credit will be earned. Students will earn 3.0 college credits. Additional fees apply.

MODERN This college world history course is a study of global development in the eras of nationalism, colonialism, CIVILIZATIONS totalitarianism and contemporary revolution of the 19th and 20th centuries ( 1815 - Present).. 0.5 high school credit will Length: 1 sem. be earned. Students will earn 3.0 college credits. Additional fees apply.

HIS 101: US HISTORY A survey of American political, economic, social, and intellectual history from the Age of European Exploration and the
TO 1865 period of colonization to the era of the American Civil War. This course thoroughly integrates the experiences of African
Length: 1 sem. Americans, Native Americans, Hispanics, and/or Asian Americans into US history in a manner that fosters
PREQ: Instructor consent understanding and appreciation of the perspectives and experiences of at least two of these groups as well as their contributions to, and interactions within, American society. Credits: 3.0 coll., 0.5 h.s; Additional fee.

HIS 102: US HISTORY A survey of American political, economic, social, and intellectual history from the era of the Civil War to the Present.
SINCE 1865 This course thoroughly integrates the experiences of African Americans, Native Americans, Hispanics, and/or Asian
Length: 1 sem. Americans into US history in a manner that fosters understanding and appreciation of the perspectives and experiences
PREQ: Instructor consent of at least two of these groups as well as their contributions to, and interactions within, American society. Credits: 3.0 coll., 0.5 h.s.; Additional fee.

## SCIENCE

Requirements: 3.0 department credits; Courses: Biology; Chemistry or Physics (or equivalents)
STEM Diploma Requirements: 4.0 department credits, 2.0 credit at honors level

| $9^{\text {th }}$ Grade | Biology ( 1.0 cr .) or Biology Honors ( 1.0 cr .) |  |
| :---: | :---: | :---: |
| $10^{\text {th }}$ Grade | Chemistry (1.0 cr.) or Chemistry Honors (1.0 cr.) |  |
| $11^{\mathrm{n} / 12^{\mathrm{n}}} \text { Grade }$ | Sem. 1 | Sem. 2 |
|  | Human Anatomy (0.5 cr.) | Forensic Science ( 0.5 cr .) |
|  | Physics (1.0 cr.) |  |
|  | AP Physics 1 (1.0 cr.) |  |
|  | AP Chemistry (1.0 cr.) |  |
|  | College Environmental Science (1.0 cr.)* |  |
|  | College Biology (1.0 cr.)* |  |

## Course Descriptions

BIOLOGY The course studies three fundamental aspects of life. One is the foundational principles of life processes. Included in Length: 2 sem. this is photosynthesis, cellular respiration, and protein synthesis. The second component is the cell. The aspects of the cell presented are chromosomes, cell division, cell membrane, and genetics. The third is a survey of organisms found in the 6 kingdoms. Students look at viruses/bacteria, protozoa, invertebrates, vertebrates, and plants. If time permits, ecology is addressed. Labs/activities are incorporated into each unit to enhance the concepts being taught.

BIOLOGY HONORS This full-year course may be taken by an advanced freshman with teacher approval or as a follow up to regular biology.
Length: 2 sem. Components covered in regular biology will also be discussed in this course, but additional core topics are introduced,
PREQ: Instructor such as cell biology, molecular biology, genetics, ecology, evolution and biodiversity and human physiology. The
consent, maintain min. Biozone IB Science Workbook, an international-based curriculum, is used as a framework. Labs/activities are
3.0 course GPA incorporated into each unit to enhance the concepts being taught.

CHEMISTRY This full-year course investigates the composition of substances and their transformations. Specific topics include lab
Length: 2 sem. safety, the Periodic Table and trends, scientific measurement (using lab equipment, metric conversions, scientific
PREQ: Biology notation, and significant digit rounding), atomic structure and parts of the atom, electron configuration rules, chemical bonding, chemical names and formulas, the mole and stoichiometry, chemical reactions, chemical reaction rate and equilibrium factors, types \& properties of solutions, and acids/bases with pH concepts. When possible and where appropriate, the class relates these principles and concepts to everyday experiences, current uses in society, appreciation for the orderliness of nature, problem solving and critical thinking skills. Student collaboration in assignment problem solving is encouraged. Students are graded on a combination of evaluated quizzes, tests, a plethora of collaborative class assignments, limited/short homework sets, lab papers, and a couple written science papers.

## CHEMISTRY HONORS

Length: 2 sem.
PREQ: Biology,
instructor consent

This course surveys basic chemical principles, studying the composition of substances and the changes that substances undergo. Topics that are covered in detail include the Periodic Table, scientific measurement, problem solving, parts of the atom and molecules, chemical names and formulas, the mole, chemical reactions, stoichiometry, properties of gasses, chemical bonding, properties of water, properties of solutions, and pH concepts. Emphasis is placed on relating these principles and concepts to everyday experiences, current uses in society, an appreciation for the orderliness of nature, the development of continued critical thinking skills, and science organization skills. Laboratory work, quizzes, tests, note taking, student organization, and analytical thinking are stressed. Course studies more topics more in-depth than standard chemistry.

PHYSICS<br>Length: 2 sem.<br>PREQ: Biology,<br>Chemistry, and Algebra<br>2 or concurrent

HUMAN ANATOMY
Length: 1 sem.
This course is designed to prepare the student who intends to pursue study in science intensive careers in classical areas of mechanics and topics are selected from fluids, sound, electricity, magnetism. Students will integrate algebra, geometry, and trigonometry with principles of physics to analyze and solve real-world problems. Topics are introduced through lecture/discussion sessions with problem solving worksheets, laboratory projects, and writing assignments that test the students ability to explain their conceptual understanding of the listed areas of classical physics.

Calling all future Pre-Med, Healthcare, and Sports Exercise Science majors! This course involves a study of the human body and physiognomy with an emphasis on the skeletal, muscular, nervous and cardiovascular systems. It is a foundational course for all areas of future study in health science and exercise science. The study of anatomy will provide students with an understanding of how systems integrate with one another. Students will begin to grasp the relationship of form and function, and see all of the complex and exciting ways in which the human body functions so efficiently.

## FORENSIC SCIENCE

Length: 1 sem.
Explore how law enforcement utilizes science to solve intriguing crime cases! Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. It includes the investigation of fingerprinting, fiber analysis, ballistics, arson, trace evidence analysis, poisons, blood spatters, and blood samples. Students are taught the proper collection, preservation, and laboratory analysis of various samples. Students will also study crime scene investigation (CSI) and evidence collection using mock crime scenes.

AP PHYSICS 1
Length: 2 sem. PREQ: Algebra 2 (can be concurrent) and Physics, instructor consent.

This two-semester honors course covers the units of kinematics, forces, momentum, work and energy, circular motion, gravitation, electricity, and waves and simple harmonic motion. These are the units covered in the AP Physics 1 exam. This course emphasizes conceptual understanding through extensive lab exercises. This conceptual understanding is then translated into the knowledge of algebraic manipulation needed to solve physics problems in the units listed above.

AP CHEMISTRY
Length: 2 sem.
Prerequisite: Science -
Chemistry or Honors Chemistry. Math
Algebra 2 (can be
concurrent) Instructor
recommendation.

This two-semester course is designed to be a rigorous extension and application of the principles learned in Honors Chemistry. Lab skills will be refined as students complete lab work related to the course. AP Chemistry includes video lectures, in-class lectures, note taking, collaborative work time, problem solving, and lab. The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. A calculator is required for this course (Texas Instrument is recommended).

## DUAL CREDIT (High School and College Credit) Additional fee.

COLLEGE BIOLOGY
Length: 2 sem
Pre-req: Biology,
Chem, or Physics
Instructor consent.

This college course is an introductory course to biology. In this course, students will be introduced to cell division and reproduction, principles of genetic inheritance, gene theory and genetic engineering, and the theory of evolution including the history of the earth, natural selection and methods of speciation. 1.0 high school credit will be earned. Students will earn 4.0 college credits. Additional fees apply. ENVIRONMENTAL

SCIENCE
Length: 2 sem
Pre-req: Biology,
Chem, or Physics
Instructor consent.

COLLEGE All of Earth's biota, including humans, ultimately relies on the natural environment for existence; yet human actions often compromise the availability of resources necessary for life. This course will address sustainability of human interactions with the environment. Students will study specific examples of environmental issues in enough depth to cultivate an appreciation for their complexity. By the end of this course, students should attain a good understanding and appreciation of the interconnections between human actions and the natural environment. Further, they will be empowered to lead environmental stewardship activities as an investment in the future of humanity.Students will earn 4.0 college credits. Additional fees apply.

## TECHNOLOGY/ENGINEERING

Technology Requirements: 1.0 total department credits
STEM Diploma: 2.0 department credits; 1 programming and 1 engineering course required and/or AP Computer Science

| $9^{\text {th }}$ Grade | Sem. 1 | Sem. 2 |
| :---: | :---: | :---: |
|  | Intro to Computer Science (0.5 cr.) | Intro to Computer Science (0.5 cr.) |
| $10^{\text {th }} / 11^{\text {th }} / 12^{\text {th }}$ Grade | Intro to Computer Science ( 0.5 cr .) <br> Aviation ( 0.5 cr .) <br> Cyber Security ( 0.5 cr .) | Intro to Computer Science ( 0.5 cr .) <br> Aviation ( 0.5 cr .) <br> Cyber Security ( 0.5 cr .) |
|  | PLTW Intro to Engineering Design (1.0 cr.) |  |
|  | PLTW Principles of Engineering (1.0 cr.) |  |
|  | AP Computer Science (1.0 cr.) |  |
|  | Drone Piloting (1.0 cr.) |  |

## Course Descriptions

INTRODUCTION TO This course introduces students to computer science concepts such as computer architecture, networks, and the COMPUTER SCIENCE Internet. Students use programming languages, algorithms and many other tools to help solve problems. They dive Length: 1 sem . deeper into how a computer works, and investigate hardware and software, and how they work together.. This introductory level course will provide a solid foundation in computer science for future study in this subject area.

AVIATION The aviation science program trains students toward earning their Sport Change sport to Private Pilot License (SPL),
Length: 1 sem. a new type of pilot certificate designed to get students safely and easily trained for recreational flying in Light-Sport
PREQ: 15 years of age or Aircraft (LSA). The aviation program is taught by Federal Aviation Administration (FAA) licensed instructors and
older consists of two parts: ground school and flight training. Ground school is taught on the SJNA campus one day a Additional fees involved week; flight training takes place at a local county Airport, one or two times per week. Grades are based on goal completion, classroom work, flight instructor evaluations, flight schedule coordination and exams. Aviation is considered a STEM Honors course.

CYBER SECURITY This course is an Introduction to Cyber Security. The course will explore security as it relates to endpoints, network,
Length: 1 sem. network edge, cloud computing, and mobile environments. Students will explore different types of cyber threats, from where they come, how they are constructed and how attacks are met and mitigated. It will also look at cybersecurity from a business and a personal perspective. Data and security issues will be explored, and lastly, the course will explore how regulation and legislation impact this arena.

DRONE PILOTING This course explores the growing field of drones and how they are utilized, with an emphasis on recreational and
Length: 2 sem. commercial opportunities, rules and regulations, and drone piloting and licensing. The drones program is taught by
PREQ: 15 years of age or a Federal Aviation Administration (FAA) licensed instructor. Drones will be provided for in-class use and students older (Must be 16 before will receive an overview of FAA rules and regulations for safe operation. Students will also learn the history of taking the FAA Exam during drones, various drone models and types, how to take pictures and videos, drone maintenance, sectional maps, and

Sem 2 of the course) how to troubleshoot various flight problems and situations. Students enrolled in Drones I will have the opportunity Additional fees involved for to take the Remote Pilot Exam (Unmanned Aircraft General (UAG) Exam) at the end of the second semester course and exam additional fee required for exam.

PLTW INTRODUCTION TO The major focus of this Project Lead the Way course is learning how to take an idea through a design process and ENGINEERING DESIGN create a 3-dimensional part that can be manufactured or produced. Students learn about various aspects of
(IED) engineering and engineering design, such as how engineers communicate through sketches and drawings. Students
Length: 2 sem. apply learned material through lessons that increase the difficulty of projects. Students use Inventor, a software PREQ: Alg. 1 and Geometry, package from AutoDesk, to help design parts on a 2 dimensional computer screen. Projects are documented in an engineering notebook which allows students to communicate solutions with others. On occasions, students will be assigned an individual project to create a 3-dimensional part and then print it on a 3-dimensional printer. Students wishing to receive honors grade/credit will be required to complete more complex projects.

PLTW PRINCIPLES OF This Project Lead the Way course exposes students to some of the major concepts that they will encounter in a ENGINEERING (POE) postsecondary engineering course of study. Students investigate areas of mechanical engineering in simple

Honors level machines and bridge trusses (statics). Students will acquire a foundation in the coding and building of robots.
Length: 2 sem. Finally, students will learn to use the Revit software program in residential architecture. POE gives students the PREQ: Alg. 2, computer opportunity to develop skills and understanding of course concepts through student centered activity projects. Used
course (or concurrent), or in combination with a teaming approach, POE challenges students to continually hone their interpersonal skills, instructor consent creative abilities, and problem solving skills based upon engineering concepts. It also allows students to develop Completion of IED strategies to enable and direct their own learning, which is the ultimate goal of education. Students wishing to beneficial receive honors grade/credit will be required to complete more complex projects.

# AP COMPUTER SCIENCE AP Computer Science Principles is an introductory college-level computing course that introduces students to the PRINCIPLES breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer Length: 2 sem. science to solve problems through the development of algorithms and programs. They incorporate abstraction into <br> PREQ: Completion of programs and use data to discover new knowledge. Students also explain how computing innovations and <br> Algebra 2, prior computer computing systems-including the internet-work, explore their potential impacts, and contribute to a computing coding course culture that is collaborative and ethical recommended 

## WORLD LANGUAGES

World Language Requirements: 2.0 credits of the same language; international students may be exempt from this requirement
Humanities Diploma: 3.0 total credits

| $\mathbf{9}^{\text {th }} / \mathbf{1 0}^{\text {th }} \boldsymbol{/ 1 ^ { \text { th } }} \boldsymbol{/} \mathbf{1 2}^{\text {th }}$ Grade | Chinese $1,2,3,4$ honors ( 1.0 cr . each level) |
| :--- | :--- |
|  | German $1,2,3,4$ honors (1.0 cr. each level) |
|  | Spanish 1,2,3,4 honors (1.0 cr. each level) |
|  | Advanced language learning available upon the approval of the language teacher ( Independent Study and Pre-AP Chinese and |
|  | AP Chinese) based on student need and ability. Contact the Academic Office or World Language Dept. for more information. |

## Course Descriptions

LEVEL 1: CHINESE, The first level of the world language curriculum is proficiency and culture oriented. It emphasizes culture and GERMAN, SPANISH communication via listening and the spoken word as well as reading and writing. It focuses on the skills needed to Length: 2 sem. communicate at a basic level in the target language. ,.. The first level provides complete coverage of elementary grammar and vocabulary by means of themati situations embedded in cultural context as a sound basis for continuing studies in the second level.

LEVEL 2: CHINESE, The second level reviews and reinforces the material presented in the first level. The second level of the world
GERMAN, SPANISH language curriculum is target language proficiency and culture oriented and emphasizes communication via Length: 2 sem. listening and speaking, as well as reading and writing.It focuses on the skills needed to communicate at a PREQ: Level 1 developing level in the target language. . Level 2 also expands the vocabulary, grammatical structures and further develops cultural knowledge.

LEVEL 3: CHINESE, The third level of the world language curriculum introduces new grammar, vocabulary, and cultural concepts as GERMAN, SPANISH well as reviews material learned in the first two levels. The four language skills and cultural awareness are further Length: 2 sem. developed with extra emphasis on Connections, and Comparisons within Communities. . PREQ: Level 2

LEVEL 4 HONORS: In the fourth level courses, students continue to learn and apply an understanding of the customs, arts and CHINESE, GERMAN, literature, history and geography related to the target language. The target language is used to make connections SPANISH and reinforce knowledge and cross cultural skills.
Length: 2 sem.
PREQ: Level 3

| FINE ARTS |  |  |
| :---: | :---: | :---: |
| Requirements: 1.0 credit minimum requirement |  |  |
|  | Sem. 1 | Sem. 2 |
|  | Intro to Art \& Design ( 0.5 cr .) | Intro to Art \& Design ( 0.5 cr .) |
|  | Advanced Art \& Design ( 0.5 cr .) | Advanced Art \& Design (0.5 cr.) |
|  | Project Photography ( 0.5 cr .) |  |
|  | Band: Beginning, Advanced (0.5 |  |
|  | Scottish Highland Drumming: Be | ( 5.5 cr . each semester) |
|  | Bagpipes: Beginning, Advanced |  |
| 11th and 12th Only | Sem. 1 | Sem. 2 |
|  |  | Yearbook (0.5 cr.) |

## Course Descriptions

## PERFORMING ARTS

Additional fees for uniform and instrument rental probable; placement in courses to be determined by instructors

# BEGINNING This class focuses on the introduction to, and the establishment of, the foundations of Scottish Highland HIGHLAND DRUMMING Drumming as an artform. Students learn the basic drumming rudiments and basic fundamental percussive Length: 2 sem. dynamics which complement traditional bagpipe music. With the fundamental rudiments mastered, and basics of music theory and reading understood, they are exposed to their first drum scores. As these scores are learned, students migrate these fundamentals onto the actual drums, enabling them to perform their foundational abilities. 


#### Abstract

ADVANCED This class focuses on the establishment and continuation of solid individual proficiencies and confidence of

HIGHLAND DRUMMING Length: 2 sem; PREQ: Beg. Drumming. Highland Drumming. A cursory review of basic technique learned in beginning and intermediate drumming, as well as the full SJNA Pipe \& Drums repertoire will be done. This will lead to a significant increase in the individual repertoire of drum scores which support tunes. Many of these could be used for special small ensemble performances at SJNA Pipes \& Drums functions. In addition to repertoire expansion, the students will focus on gaining near total self confidence in Highland Drumming.


BEGINNING BAGPIPES This class focuses on the introduction to and establishment of the foundations of bagpiping as an artform. Using the practice chanter, students learn the basic scale of the bagpipes as well as the basic fundamental rudiments that adorn traditional bagpipe music. Basic music theory, music reading, and writing are incorporated to prepare the students for learning the tunes that will build the foundation of the SJNA Pipes \& Drums repertoire. Students are slowly introduced to the mechanics and operation of the Great Highland Bagpipe

ADVANCED BAGPIPES This class focuses on the establishment of solid individual proficiencies and self reliance with the Great Highland
Length: 2 sem. PREQ: Beg. Bagpipes. Bagpipes. This includes a continued growth in knowledge of tunes, techniques and musicality. A cursory review of basic technique learned in Beginning and Intermediate Bagpipes, as well as the full SJNA Pipe \& Drums repertoire will begin this class. The focus of this class will move into advanced embellishment techniques and an exposure to a much broader understanding of the canon of Celtic folk music. In addition to repertoire expansion, the students will focus on gaining near total self reliance on the Great Highland Bagpipe itself. This includes a thorough knowledge of the setup of the instrument and the impact of the environment on its function. It also includes a review of drone tuning, and establishing a solid knowledge of the harmonic tuning of the bagpipe chanter.

BEGINNING BAND Through the use of lesson material and practice, students learn the fundamentals to play a band instrument. This Length: 2 sem. introductory band class is for all instrumentalists of all ability levels. The course provides a great opportunity to maintain or develop skills in instrumental music.

ADVANCED BAND This course moves students beyond instrumental fundamentals and gives each band member the opportunity to

Length: 2 sem.
PREQ: Beg. Band. advance their musicianship to a higher level. The band instructor emphasizes artistic performance and encourages students to acquire more advanced technical and expressive skills while playing and learning more about their specific instrument(s). We dive into the more intricate aspects of music (melody, harmony, timbre, form, texture, rhythm, and meter). This class is designed for students who wish to advance themselves through music.

## VISUAL ARTS

INTRODUCTION TO An introductory course that addresses both 2 and 3 dimensional studio production. The 2-D portion emphasizes
ART \& DESIGN observational drawing through studies of still-lifes, portraits and figures, while emphasizing the elements of line, valı Length: 1 sem. and proportions while the 3-D studio productions will emphasize the principles of balance, harmony, and variety.

ADVANCED ART \& DESIGN
Length: 1 sem
Prereq.: Intro. to Art.

This course is ideal for the student interested in further exploration of artwork through painting and drawing, freestyle art, and printmaking. With the foundation of the elements and principles of design (introduced in Intro. to Art), the students explore a number of materials and techniques. Students interested in expanding their own creativity with guided assistance will develop a deeper appreciation for a variety of art forms. Through individual assessments and group critiques, students acquire optimal development on problem solving and critical thinking skills through creative projects including mixed media, sculpture, mosaic, fiber, printmaking, recycled, papier mache and a variety of other mediums. Students explore a variety of artists and art processes.

PROJECT Learning the foundations of photography and marketing will be explored in this digital media class. Students will PHOTOGRAPHY learn how to take better photographs from concept to post production. They will learn and practice many key Length: 1 sem concepts while putting their photos to use in creative ways. Post production work, collaborative projects, personal Prereq.: Intro. to Art. expression and adapting to different conditions are all explored in this class. A phone with a camera is required.

YEARBOOK Yearbook class is a second semester elective credit that produces St. John's Northwestern Academies yearbook.
Length: 1 sem Ideal members of the yearbook staff are creative and motivated people who will have a sense of pride in Prereq.: Intro. to Art. accomplishing this important school tradition. Yearbook staff are expected to have a high level of maturity and the ability to work independently. Staff will be responsible for the production, design, and publication of the school yearbook, which requires time spent both in and out of class. This is a wonderful opportunity for students to exercise creativity, while developing new skills in computer design, photography, copywriting, and project management.

## LEADERSHIP

Leadership requirements: 1.0 department credits
$\mathbf{9}^{\text {th }} / \mathbf{1 0}^{\text {th }} / \mathbf{1 1}^{\text {th }} / \mathbf{1 2}^{\text {th }}$ grade JROTC LEAD 1 ( 1.0 cr .)
JROTC LEAD 2 (1.0 cr.)
Leadership Development - Self Leadership/Character and Leadership (1.0 cr.)
Intermediate Leadership Development - Developing Leadership Skills/Finding One’s Own Style (1.0 cr.)
Advanced Leadership - Concepts and Practice/Ethics and Behavior (1.0 cr.)

## Course Descriptions

## MILITARY ACADEMY PROGRAM - JROTC

The nationally accredited Junior Reserve Officers' Training Corps (JROTC) program is a US Army sponsored curriculum designed to prepare cadets for responsible leadership roles while making them aware of their rights, responsibilities, and privileges as citizens along with supporting programs. Seniors in key leadership positions in the Military Academy may be required to take upper level leadership courses.

> EMERGING \& Cadets are introduced to content that will help the inner leader begin to emerge. Later in the year, students begin to take on DEVELOPING developmental leadership roles. Lessons covered during this first and second-year course include foundational JROTC
> LEADERSHIP knowledge, codes of conduct, growth plans, team building drills, conflict resolution, and leadership competencies and styles.
> Length: 2 sem. Moving towards 201, students will delve further into elements of leadership, decision making skills, the importance of communication, ethical concepts, and more.

SUPERVISING \& Cadets build on what they learned in emerging and developmental leadership, embarking on supervisory and management
MANAGING responsibilities. Cadets will oversee planning and project implementation in the local JROTC program and surrounding
LEADERSHIP community. Moving into 401, cadets will manage and lead in the battalion. Within 401, a cadet is ready to assume Length: 2 sem. responsibilities and manage him or herself and others whom they work with or oversee as a Cadet Manager. PREQ: LEAD 1

ORGANIZATIONAL Cadets are invited to take this course as they progress their way through ranks, responsibilities, and positions that will require LEADERSHIP extensive planning and collaboration throughout the entire JROTC department. Cadets are able to see their Length: 2 sem. recommendations, ideas, and decisions enacted on campus and understand the real implementations, planning procedures, PREQ: Instructor and requirements needed to lead within an organization.

Approval

## PREFECT ACADEMY PROGRAM

This sequence of leadership development coursework is designed to create formative experiences focused on students becoming leaders of character, competence, and compassion. Seniors in key leadership positions in the Prefect Academy may be required to take upper level courses.

LEADERSHIP SEM 1 is designed to educate and inspire developing leaders to become difference makers in their school community, local community, and the world beyond. Through group discussion, presentations, community engagement and team building activities, students will actively pursue topics from followership to collaborative leadership within the framework of various groups. Through a combination of reflections and discussions, students will better understand the importance of themselves as leaders. We then examine the foundation of self-leadership and apply it to the larger framework of the importance of character in leadership. The class pays particular attention to understanding leadership and its various styles, and the prominent leadership traits of intelligence, confidence, charisma, determination, sociability, and integrity. The character of the leader is the fundamental aspect of good leadership, and case studies, discussion, written reflection, and reading assignments, will all contribute to a greater knowledge of the importance of character and leadership.

INTERMEDIATE SEM 1 is structured to assist students in developing their leadership skills and abilities. Particular attention will be given to
LEADERSHIP administrative, interpersonal, and conceptual skills, as well as discovering and developing strengths. The course is designed DEVELOPMENT to increase self-esteem as well as self-confidence of the student. Class discussion, case studies, written reflections, external Length: 2 sem. projects, and reading assignments, will aid in further enhancing an understanding of improving leadership skills. SEM 2 is PREQ: Instructor moving beyond developing leadership skills, while learning to articulate and implement a vision for the group or organization.

Approval Establishing a constructive climate where structure and cohesiveness contribute to excellence will also prove paramount. Through a combination of case studies, discussion, written reflection, and reading assignments, students will better understand their own leadership styles that will help to give direction to the respective group.

ADVANCED SEM 1 will explore practical strategies to become a more effective leader. Various leadership styles will be incorporated into
LEADERSHIP the class to better understand what it is exactly that constitutes a successful leader. Through a combination of case studies,
EDUCATION community service, discussion, self-evaluation, written reflection, and reading assignments, students will better comprehend Length: 2 sem. and improve their leadership abilities. SEM 2, Ethics, is the bedrock of leadership, and the class will focus on the PREQ: Instructor responsibility of leaders to foster ethical behavior. The course will explore ethical dilemmas in various situations to better

Approval understand the inherent concepts by stressing the application of critical thinking, conflict resolution, and ethical decision making in the context of active leadership. Through a combination of case studies, community service, discussion, self-evaluation, written reflection, and reading assignments, students will better comprehend the importance of ethics as the foundation of leadership.

## PHYSICAL EDUCATION

Requirements: 1.5 department credits; Courses: Health

| $\mathbf{9}^{\text {th }} / 10^{\text {th }} / 11^{\text {th }} / 12^{\text {th }}$ Grade | Sem. | Sem. 2 |
| :---: | :---: | :---: |
|  | Personal Fitness ( 0.5 cr .) | Personal Fitness (0.5 cr.) |
|  | Health ( 0.5 cr .) | Health ( 0.5 cr .) |
|  | Fall, Winter or Spring Team Sport ( 0.5 cr .) See course descriptions for details |  |

## Course Descriptions

PERSONAL The Daily WOD (Workout of the Day) uses constantly varied, functional movements, executed at high intensity. Students FITNESS improve fitness in 10 different areas: cardiovascular endurance, strength, stamina, speed, flexibility, power, balance,
Length: 1 sem. coordination, agility, and accuracy. Every workout can be modified and scaled to each student's unique set of abilities.

HEALTH This high school course teaches the benefits of a lifelong commitment to one's health and wellness, and a respect for Length: 1 sem. others', through personal responsibility and decision-making, positive self esteem, self-reflection, and access to pertinent, useful information. Topics may include fitness, nutrition, human growth and development, at-risk behaviors, mental and social health, relationships, CPR, and general first aid.

TEAM SPORTS Students who actively participate in a team sport (WIAA sports or Raiders) for $95 \%$ of a season may earn 0.5 credit toward the required physical education credits, up to 1.0 credit ( 2 seasons) total. Students must declare credit intention at the start of the season with approval from the coach.

## GENERAL ELECTIVES

Elective Requirements: Study Skills (freshmen); College/Career Planning (juniors) ( 0.5 cr .)

| $9^{\text {th }} / 1^{\text {th }}$ Grade | Sem. 1 | Sem. 2 |
| :---: | :---: | :---: |
|  | Study Skills ( 0.5 cr .) <br> Personal Finance ( 0.5 cr .) | Study Skills ( 0.5 cr .) <br> Personal Finance ( 0.5 cr .) |
| 11 ${ }^{\text {th }} / 12^{\text {th }}$ Grade | College \& Career Planning ( 0.5 cr .) | College \& Career Planning ( 0.5 cr .) |
|  | College Intro to Business ( 0.5 cr .)* | College General Economics ( 0.5 cr .)* |
|  | College Financial Literacy ( 0.5 cr .)* | College Essentials of Financial Accounting (0.5 cr.)* |
|  | Senior Study Hall (no credit, seniors only) |  |
|  | Emergency Medical Technician (1.0 cr.) Off campus; requires modified weekly schedule. Additional fees apply. |  |

## Course Descriptions

COLLEGE \& CAREER This class provides students with the tools and skills necessary for applying to colleges, job openings and gaining PLANNING an overall understanding of which scholastic or working environments are right for them. Geared after each Length: 1 sem. student's individual post-secondary plans, students will fill out the majority of their Common Application, write their personal essay, learn how to answer school-specific essay questions, create a resume, practice mock job interviews, dedicate time to standardized test prep, and more. They also take an aptitude test and explore both schools and careers based on their individual results. Successful completion of this course is a graduation requirement.

SENIOR STUDY HALL This specialized study hall is supervised by the College \& Career Counselor and is designated for students who Length: 1 sem. would like additional help completing college applications and writing college essays. This study hall is offered in Approval needed. the first semester of senior year only and the primary objective is to fill out college applications before Early Action, Early Decision, or Regular Decision deadlines. No credit or grade is given for this class.

PERSONAL FINANCE This course informs students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered include income, money management, spending and credit, as well as saving and investing. Students design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course provides a foundational understanding for making informed personal financial decisions leading to financial independence.

STUDY SKILLS This course is designed to teach students how to effectively use study techniques, time management and apply
Length: 1 sem. real-world applications while implementing 21 st century skills. Students develop individual strategies for note-taking, listening, test-taking, and organization while understanding the best way to prioritize and manage their time inside and outside of the classroom. In utilizing these skills, students achieve academic success and personal growth.

INITIAL EMT COURSE Students enrolled in the Initial EMT (Emergency Medical Technician) course will become state certified as an EMT.
Length: 2 sem. Along with technical knowledge, first aid training, CPR certification, utilizing basic life support equipment, performing triage, and other essential competencies, students learn all aspects of employment as an EMT. This course is offered off-campus at the Lake Country Fire Rescue Training Center and will require a modified weekly schedule. Additional fees apply.

## DUAL CREDIT (High School and College Credit) Additional fee.

INTRODUCTION TO This is an introductory college business course that provides an overview of business and the role it plays in BUSINESS economic, social, and political environments. Students explore functions of modern business management and also
Length: 1 sem will learn general business terminology and concepts, and study current business issues and trends. Students will Junior or Senior Status earn 0.5 in high school elective credit and 3.0 college credits. Additional fees apply.

Approval Required
FINANCIAL LITERACY This college economics course is designed to build personal financial skills that have a lifetime of usefulness. It
Length: 1 sem covers the basic areas of personal financial planning; budgeting, cash and credit; housing and transportation;
Junior or Senior Status insurance; investments; identity theft and privacy protection; and planning for retirement. Students will earn 0.5 in
Approval Required high school elective credit and 3.0 college credits. Additional fees apply.
GENERAL ECONOMICS This college course provides an analysis of some of the major current issues in the American economy undertaken
Length: 1 sem after a historical survey of the emergence of modern economic institutions. By studying economics, you will learn to
Junior or Senior Status think critically and systematically about individual and collective decisions over the use of resources and learn how
Approval Required these choices affect societies. From pollution to poverty to import tariffs, students in economics use intuition, mathematical models, and statistical analysis to evaluate everyday choices made by individuals, firms, and governments. Students will earn 0.5 in high school elective credit and 3.0 college credits. Additional fees apply.

ESSENTIALS OF This college course provides an introduction to the principles of financial accounting and the preparation,
FINANCIAL ACCOUNTING interpretation, and analysis of general purpose financial statements for parties external to the organization.
Length: 1 sem Students who take this course are armed with the strength to analyze, interpret and communicate financial Junior or Senior Status information used by management. Accounting is an exciting career that offers above-average financial Approval Required opportunities. Students will earn 0.5 in high school elective credit and 3.0 college credits. Additional fees apply.

## MIDDLE SCHOOL ACADEMY, Grades 6-8

Students in grades 6, 7 and 8 follow a standard course sequence. Students who excel in mathematics or other core subjects may take high school courses for high school credit upon approval from the Academic Office; however, students must still obtain the required department credits in high school. For students to advance to high school, students must demonstrate success in the content areas of English, math, science and social studies.

| DEPARTMENT | $6^{\text {th }}$ Grade | $7^{\text {th }}$ Grade | $8^{\text {th }}$ Grade |
| :---: | :---: | :---: | :---: |
| ENGLISH | 6th Grade English and Language Arts | 7th Grade English and Language Arts | 8th Grade English and Language Arts or Humanities English Honors |
| ESL | Beginning or Intermediate Literacy | Beginning or Intermediate Literacy | Beginning or Intermediate Literacy |
| MATHEMATICS | Mathematics 6 | Mathematics 7 or Pre-Algebra | Pre-Algebra or Algebra 1 |
| SCIENCE | Earth Science | Life Science | Physical Science |
| SOCIAL STUDIES | Social Studies | Geography | American History or Humanities History Honors |
| PHYSICAL EDUCATION | 6/7 Physical Education | 6/7 Physical Education | Physical Education/Health |
| LEADERSHIP | 6/7 Aspiring Leaders 1 Foundational Leadership | 6/7 Aspiring Leaders 1 Foundational Leadership | Aspiring Leaders 2 Outward Leadership |
| ELECTIVE ROTATION | 6/7 Exploratory Music; Art; PLTW Engineering; Digital Literacy ; Foreign Language Exploratory (FLEX); FACE \& Service Learning | 6/7 Exploratory Music; Art; PLTW Engineering; Digital Literacy ; <br> Foreign Language Exploratory (FLEX); <br> FACE \& Service Learning | PLTW Design and Modeling; PLTW Flight and Space; Computer Science Discoveries; Art; Music: Band, Pipes, or Drums Ensemble; Intro to World Languages |

## $\underline{6}^{\text {TH }}$ GRADE ENGLISH AND LANGUAGE ARTS

This 6th Grade course focuses on a continuation of the reading, writing, listening, and speaking skills acquired in elementary school. Students will explore a variety of literary genres, and they will learn to analyze and interpret texts, identify story elements, and understand the author's purpose. Writing skills such as grammar, sentence structure and essay development will be emphasized. Additionally, students will participate in classroom discussions, presentations, and collaborative activities to continue to develop their communication skills.

## $\mathbf{Z}^{\text {TH }}$ GRADE ENGLISH AND LANGUAGE ARTS

This 7th Grade course provides a basic understanding of grammar usage, spelling, mechanics, and writing processes. Topics include parts of speech, parts of a sentence, kinds of sentence structure, clauses, phrases, agreement, capitalization, punctuation, steps of the writing process, writing effective sentences, writing effective paragraphs, writing effective papers and common writing errors. Spelling mechanics include prefixes, suffixes, word origins, homophones, synonyms, antonyms, spelling changes from singular to plural, spelling changes from adding prefixes and suffixes, possessives, and common spelling errors.

## $\underline{8}^{\text {TH }}$ GRADE ENGLISH AND LANGUAGE ARTS

This 8th Grade course provides a more in depth understanding of grammar usage, spelling, mechanics, and writing processes. Topics covered include parts of speech, parts of a sentence, kinds of sentence structure, clauses, phrases, verbals, agreement, capitalization, punctuation, steps of the writing process, forms of writing, writing effective sentences, writing effective paragraphs, and common writing errors.

## HUMANITIES ENGLISH HONORS 8

This honors course utilizes the requisite curriculum, standards, and expectations in the 8th grade English, but it explores content and skills at a greater depth. There will be a strong emphasis on developing students' ability to analyze complex readings, establish and develop strong claims, and strengthen students' writing and research skills. This course prepares students for the high school honors sequence in English. Instructor or academic office approval required to enroll.

## EARTH SCIENCE 6

Course engages students in hands-on activities, experiments, and observations in order to understand various topics related to understanding our planet Earth. Topics may include, but are not limited to, Earth's history and structure, rocks and minerals, weather and climate, ecosystems, and Earth's natural resources. Students develop skills such as data analysis, critical thinking, and communication.

## LIFE SCIENCE 7

Beginning with earth science, students learn about the universe and the relationship between the sun, earth and moon. Second semester studies life science, the life of a cell and the six kingdom system.

## PHYSICAL SCIENCE 8

Course introduces various topics pertaining to the physical sciences. First semester concentrates on the fundamentals of Chemistry while the second semester focuses on Physics. This course establishes a stepping-stone for successfully pursuing full-year chemistry and physics courses during high school. Basic information relating to laboratory techniques, the scientific method, experimental design and procedure, physical and chemical properties of matter, and laws of motion are addressed. Technology used for data collection, analysis, and presentation as well as research is integrated throughout the course.

## PLTW GATEWAY

This course guides students through a full spectrum investigation of engineering; including the different types of engineering, career paths, and the basics of engineering. Students learn how to turn problems into ideas, and develop a basic understanding of each area of engineering; civil, mechanical, chemical, and biological. Students in this course also work through hands-on activities in the Project Lead The Way curriculum areas of design and modeling automation and robotics, and flight and space.

## TECHNOLOGY and DIGITAL LITERACY

In this introductory course, students will learn the foundations for using technology as an educational tool and resource. Students will receive a foundation on what it means to be a responsible digital citizen. Other skills include but are not limited to keyboarding, document management, word processing, spreadsheet, and presentation skills.

## MS ESL BEGINNING LITERACY

This is an ESL literacy course for all new international students in middle school entering SJNA and testing at the Entering ( Level 1) \& Emerging (Level 2) of the WIDA Consortium English Language Proficiency Standards. ( WIDA MODEL Screener and Progress Monitoring Test). New international students enrolled in this course may be at the early stages of literacy and/or had little exposure to understanding the written language of English. The focus of this course is to expose ESL students to different academic texts, build reading strategies, academic English vocabulary, grammar and writing at the entering and emerging levels. The course is built on thematic units promoting 21 st century academic skills by teaching key reading skills, grammar for writing, lower and higher order thinking skills.

## MS ESL INTERMEDIATE LITERACY

This is an ESL literacy course for all new international students in middle school entering SJNA and testing ( screened) at the Developing (Level 3)\& Expanding (Level 4) of the WIDA Consortium English Language Proficiency Standards. New international students enrolled in this course may have already developed foundational grammar, good writing and reading skills and had some exposure to understanding the written language of English. The focus of this course is to expose ESL students to different academic texts, strengthen reading strategies, improve academic English vocabulary, grammar and writing at the developing and expanding levels. The course is built on thematic units promoting 21st century academic skills by teaching key reading skills, grammar for writing, lower and higher order thinking skills.

## ESL STUDY LAB

This study period is scheduled during the academic day and is designed for students to get individualized additional academic support in all classes. Students will participate in regular conferencing with their teacher to review assignments, practice and reinforce content, or to review homework support.

## MATHEMATICS 6

Course builds on students' prior learning and math experiences and begins to explore more advanced math concepts. The development of 6th grade math skills include: understanding number sense, practicing the order of operations, understanding the basics of algebraic expression and geometry concepts, measurement and data analysis, with an overall emphasis of developing problem solving strategies and how students might apply these math concepts to real life situations.

## MATHEMATICS 7

Course covers basic mathematical skills and gives students a brief preview of selected topics to be studied in depth at a later date. Fractions are covered thoroughly, and an overview of geometry, statistics, number theory, and proportions is presented. A brief introduction to basic algebra concepts is included.

## PRE-ALGEBRA

Pre-Algebra is a prerequisite to Algebra 1. This course reviews the underlying principles of algebra and arithmetic skills. It includes a study of basic mathematical operations to include using graphs, problem solving techniques, and fundamentals of estimations.

## PLTW DESIGN and MODELING

In this semester PLTW Gateway course for middle school students, students gain valuable collaboration and critical thinking skills. They discover the design process and develop an understanding of the influence of creativity and innovation in their lives. They are then challenged and empowered to use and apply what they've learned throughout the unit to design a therapeutic toy for a child who has cerebral palsy.

## PLTW SPACE AND FLIGHT

In this semester-long PLTW course for middle school students, the exciting world of aerospace comes alive through the Flight and Space (FS) unit. Students continue building 21st century learning skills as they become engineers in order to design and create a prototype, and then test models to learn about the science of flight and what it takes to travel and live in space. They solve real-world aviation and space challenges and plan a mission to Mars.

## COMPUTER SCIENCE DISCOVERIES 8

Computer Science Discoveries is an elective course which introduces computer science concepts to middle school students. It is a foundational piece to the high school computer science curriculum. The course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, data, and artificial intelligence, while inspiring students as they build their own websites, apps, animations, games, and physical computing systems.

## PHYSICAL EDUCATION 6/7

Middle school PE courses place a strong emphasis on the positive personal and group benefits of teamwork, team sports, and physical fitness. Students have the opportunity to participate in a variety of team sports that include, but are not limited to, basketball, kickball, softball, frisbee golf, and broomball. Students are asked to dress in appropriate PE wear and athletic shoes.

## INTRODUCTION TO PHYSICAL ACTIVITY/HEALTH 8

Students develop the physical and mental capabilities to continue their overall development of fitness through teamwork, goal setting, good sportsmanship, problem solving and critical thinking. Curriculum is centered on trying new games and activities, with education directed toward achieving knowledge about their bodies, minds, and environment to make positive and healthy choices. On gym days, students are asked to dress in appropriate PE wear and athletic shoes.

## EXPLORATORY ART 6/7

Course provides students the opportunity to create both multi-dimensional artwork. Productions will include: drawings, paintings, printmaking, sculpture and mixed media. The students will engage in the life skills of visual problem solving and critical thinking as they create works emphasizing the elements of art and the principles of design.

## EXPLORATORY MUSIC 6/7

6th and 7th grade students who are not enrolled in a band, pipes, or drumming ensemble will participate in this elective rotation to learn and sample different instrument families, to receive an introduction to music history and theory, and to explore a wide range of music genres, styles, and topics. Goals are to establish an appreciation for music and to motivate students to continue learning and performing in band, bagpipes, or drumming.

## FOREIGN LANGUAGE EXPLORATORATION (FLEX) - $6 / 7$

Semester-long course introduces students to language learning, builds awareness and appreciation of other cultures, develops an appreciation for the value of learning another language, and increases motivation for future language study. Students explore 4-5 different languages and cultures.

## SOCIAL STUDIES 6

This 6th grade social studies course is an exploration of the geography, history, civics, and culture of ancient civilizations in the western hemisphere. Students will learn to think critically, analyze primary and secondary sources, and develop research skills. Students may engage in collaborative projects, presentations, and/or simulations in order to enhance their understanding of history and its impacts on society today.

## GEOGRAPHY 7

This course provides students with a basic understanding of Geography, both physical and political in nature. In addition, class discussions focus on cultural values, location in the world, and environmental issues and current events for each region examined.

## AMERICAN HISTORY 8

A basic survey course commencing with the age of exploration and colonization and continues through the twentieth century. First semester emphasizes colonization, the War of Independence, the Constitution, Civil War, Reconstruction and 20th century United States history which includes World War I, the Great Depression, World War II, the Cold War, the 1960s, and the collapse of the Soviet Union.

## HUMANITIES HISTORY HONORS 8

This honors course utilizes the requisite curriculum, standards, and expectations in the 8th grade American History, but it explores content and skills at a greater depth. There will be a strong emphasis on developing students' ability to analyze complex readings, establish and develop strong claims, and strengthen students' writing and research skills. This course prepares students for the high school honors sequence in History. Instructor or academic office approval required to enroll.

## ASPIRING LEADERS 1 - GRADE 6/7

In the first academic year of Emerging Leaders, students will examine the foundational competencies that all leaders must develop: social awareness, self-awareness, self-management, responsible decision-making, and relationship skills. Through a combination of experiential learning, opportunities for self-evaluation, projects, discussions, and written reflection, students will continue to delve deeper into competencies such as, self-confidence, empathy, perspective taking, stress management, respect for others, goal setting and organizational skills. Students will learn to recognize their own strengths and challenges in these areas, and will also explore personal interest, aptitudes, strengths, and areas of challenge and learn about careers and the world of work. The course will conclude with a culminating activity that allows students to become socially engaged in a service-learning opportunity.

## ASPIRING LEADERS 2 - GRADE 8

During the second academic year, students will move beyond self-exploration to a collaborative focus on how they build relationships, communication, work on a team, appreciate diversity, and engage in the world around them. Students will also build upon the previous year of social and emotional competencies as they shift toward application of their strengths, identifying problems, analyzing solutions, and reflecting on moral and ethical principles. Questions will invariably emerge such as, "What motivates me to make a difference?" and "How can I use my gifts and talents to serve others?" The course will conclude with a capstone project that allows students to work on a team to solve a fundamental problem in their community.

## INTRODUCTION TO WORLD LANGUAGES - 8

This year-long class expands on what students explored in FLEX 6/7 and builds upon their exposure to our main high school languages. This course is broken into quarters, with an introductory linguistics and culture quarter, followed by a quarter dedicated to Spanish, Chinese, and German. Students will learn how each language is used worldwide and the benefits of studying one or more of these global languages as they transition into high school the following year.

## BAND ENSEMBLE

Through the use of lesson material and practice, students learn the fundamentals to play a band instrument. This introductory band class is for all instrumentalists of all ability levels. The course provides a great opportunity to maintain or develop skills in instrumental music. Students with band experience may be considered for the advanced class.

## BAGPIPES ENSEMBLE

This class focuses on the introduction to and establishment of the foundations of bagpiping as an artform. Using the practice chanter, students learn the basic scale of the bagpipes as well as the basic fundamental rudiments that adorn traditional bagpipe music. Basic music theory, music reading, and writing are incorporated to prepare the students for learning the tunes that will build the foundation of the SJNA Pipes \& Drums repertoire. Students are slowly introduced to the mechanics and operation of the Great Highland Bagpipe.

## HIGHLAND DRUMMING ENSEMBLE

This class focuses on the introduction to, and the establishment of, the foundations of Scottish Highland Drumming as an artform. Students learn the basic drumming rudiments and basic fundamental percussive dynamics which complement traditional bagpipe music. With the fundamental rudiments mastered, and basics of music theory and reading understood, they are exposed to their first drum scores. As these scores are learned, students migrate these fundamentals onto the actual drums, enabling them to perform their foundational abilities.

## FACE \& SERVICE LEARNING

This semester course in the middle school elective rotation is for students in grades 6 and 7. This engaging and fun course begins with a Family and Consumer Education unit exposing students to a variety of important life skills such as cooking and healthy eating, budgeting and shopping, first aid and safety, and sewing to name a few. The semester ends with a team service learning project in which students will identify a community issue, learn about the causes, brainstorm solutions, and develop a plan to help the community improve.


[^0]:    AP HUMAN AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human GEOGRAPHY understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to Length: 2 sem. examine socioeconomic organization and its environmental consequences. They also learn about the methods and PREQ: Instructor tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography consent Standards. The course is equivalent to an introductory college-level course in human geography.

