UPPER SCHOOL CURRICULUM

ENGLISH

St. Paul's English Students..

Seek truth. They respect fact and can distinguish it from opinion; they recognize that language is a medium and that the truth language conveys is contextual but not arbitrary.
Seek knowledge. They strive to build both a command of language and a discipline-specific vocabulary; they develop the skills and strategies necessary to read a range of texts closely.
Seek excellence. They can articulate their understanding of text and of the world with clarity; they read complicated texts across genres with confidence.
Live by faith. They appreciate how ideas and beliefs shape our shared reality; they readily open themselves to new experiences – real and mediated – and to other people.
Live by compassion. They listen and speak thoughtfully. They use their reading of narrative and fiction to build empathy and to better recognize their relative position in the world.
Live by integrity. They model respect, kindness and high character; they build nuanced arguments, which they justify in good faith and with appropriate evidence.

English 9

This course emphasizes writing as an act of thinking. Learning good habits of close reading, students enhance their written expression with logical and critical thinking. Students and teachers supplement core texts—taught across the grade by all teachers—with materials appropriate to individual classrooms, students, and contemporary situations. Students use the readings: (I) to help distinguish fact from inference and details from conclusions; (2) to inspire insightful responses that are products of original and creative thought; and (3) to prompt writing by providing distinct models of varying type.

English IO

This course underscores basic competency in reading and writing by providing intensive training in literary fundamentals and expository writing. Student texts come primarily from the American literary tradition—familiar ground that allows the boys to hone and polish their skills. By studying a range of literary works and techniques within that tradition, students further develop their analytical and interpretive skills. By emulating such works and techniques, students further develop their ability to express themselves.

The IB English program is a two-year program in grades II and I2 that requires formal and informal oral presentations, formal written analytical papers on international literature, and final exams that cover the overall goals of the English Department—with particular focus on close reading, personal interpretation, and effective communication. All 11th and 12th grade students take IB English A (Literature) at either Higher Level or Standard Level.

SOCIAL SCIENCES

World History Grade 9, I credit

The Ninth Grade World History course is the fundamental building block of the Upper School History experience at St. Paul's. This skills-oriented, student-centered course focuses on global relationships and interconnectedness, the role of trade, cultural diffusion and comparative history. Bridging the ancient civilizations studied in the Eighth Grade to the American experience studied in Tenth Grade, the Ninth Grade World History course continues the methodical development of reading comprehension, writing and research skills learned in the Middle School. Students examine the influence of the earth in human, physical and political terms through extensive work in geography, and they analyze the significance of the most illustrative examples of art, architecture and technology of each culture under study. At every step, the course accentuates student investment in the learning process, helping each student build their repertoire of study skills through consistent practice, while also learning the fundamentals of the Socratic dialogue at the heart of the St. Paul's History experience. The course concludes with a capstone research project centered on a topic of each student's choosing. Using both resources provided by their teachers and resources they find themselves, students conduct a methodical investigation into history through a guided sequence of reading, note-taking, analysis and writing that culminates in a coherent, evidence-based conclusion. In its focus on developing a flexible, imaginative and multi-layered approach to understanding the world, the course represents the first step of the International Baccalaureate (IB) program in History at St. Paul's, laying a solid foundation for success not only in the Tenth Grade United States History course that immediately follows, but also in the IB History Standard Level and Higher Level course sequence available in the IIth and I2th Grades.

United States History

Grade 10, 1 credit

This broad survey of our nation's origins, development, and emergence as a world power examines the forces that have shaped the United States while sharpening the core skills necessary for success in International Baccalaureate History and as citizens in today's complex world. It begins with an investigation of the early American colonies, American Revolution and Constitution, the course explains the long-term impact of the Renaissance, Reformation and Age of Exploration studied in Ninth Grade World History. The class continues by focusing on the challenges faced by the new nation, both large and small, from the Whiskey Rebellion and Trail of Tears to the Civil War and Reconstruction. The year concludes with a study of the transformation of the United States from an inward-looking nation to a world power, exploring the Industrial Revolution, Progressive Era, and World Wars through the lenses of ethnicity, social class, gender, and religion. Class discussions are essential components of the course, as understanding the role of differing perspectives and compromise are key to being effective in today's society. The course builds deliberately and methodically on research, reading comprehension and writing skills addressed in the World History course, providing students with specific strategies and tools for interpreting complicated texts and incorporating the ideas and events encountered there into their written work and the class debate.

IB Economics (Standard Level)

Grades II and I2, two year course, I credit each year

This two year course is a survey of both micro- and macro-economic theory. It examines how human beings make decisions about the allocation of scarce resources among alternative uses. In addition to the study of fundamental concepts concerning supply, demand, and government's possible roles in the economy, the course explores varieties of free-market structures and examines debates about taxation and fiscal and monetary policy. After reviewing macroeconomic models, the course emphasizes global topics, including international trade and lesser-developed nations. In addition to rounding out students' grasp of economics, these units are aimed toward promoting global citizenship, providing additional background in international politics and links to various topics already studied in U.S. and world history. A special feature of the course is student application of economic theory and terminology in creating a portfolio of commentaries on recent economic news articles. Students will be prepared to take the IB SL Economics Exam in May of 12th grade. Both the exam and the portfolio place an emphasis on analytical writing over computation.

IB History (Standard Level I) Grade II, I credit

IB Standard Level History is a global survey of the key events of the Twentieth Century. SL I focuses on the first half of the century and is broken into four main categories: New Imperialism, Ideologies, and Economic Theories, Global Conflict Round I and Global Conflict Round 2. These heading provide the student to follow the causes and events of our modern world. While much attention is focused on America's history, an international perspective is used to fully explore the thinking and reasoning that guided the Modern Era. Students who take this class will be provided with the content necessary to be successful in

the culminating IB History Exam at the end of their senior year.

IB History (Standard Level 2) Grade 12, I credit

IB Standard Level History is a global survey of the key events of the Twentieth Century. IB SL 2 is designed to focus the students' attention to specific topics as an example of modern governments in action. The topics are: The Bill of Rights, Authoritarian States (Apartheid), Civil Rights in the US, and the Cold War. The subject matter is purposefully selected to highlight the complexities of a modern democracy and examine some of the specific challenges involved in protecting individual rights in our modern global world. These topics were also specifically selected to expose the students to the content necessary for success in the IB History Exam at the end of the year.

IB History (Higher Level I) Grade II, I credit

The first year of the two-year International Baccalaureate History sequence covers the most important events, people, and phenomena from 1898-1949 and explicitly links them to today's world. The course examines Imperialism, the First World War, the birth of Communism, the Great Depression and the rise of Fascism, the subsequent Second World War, and the origins of the Cold War in post-war Europe. There is intensive development of the historical skills emphasized in the Ninth and Tenth Grade courses, with particular emphasis placed on source analysis and formal research, both of which are necessary for success on the IB History Internal Assessment (completed during the spring of the course) and the IB History Exam (completed at the end of the following year). The IBHLI History course will approach the content through textual, audio-visual, musical and artistic media, compelling students to handle and interpret content from as many different perspectives as possible. Throughout, the IBHLI course will emphasize inquiry and discussion, addressing key 20th Century concepts through informal and formal discussion-centered activities. The foremost priorities of this course are for the students to be adequately prepared for higher education, and to gain a significantly greater understanding of how the events of the first half of the 20th Century continue to challenge our society today.

IB History (Higher Level 2) Grade 12, I credit

The second year of the two-year IB History sequence covers the most important events, people and phenomena 1953-1991 and explicitly links them to today's world. The course examines the Chinese Communist Revolution, the Korean Conflict, Civil Rights, Vietnam, the Modernization of China, the end of the Cold War, and finally a comprehensive review of both HL1 and HL2. IB HL2 continues the intensive development of skills that marks the IB HL1 course and the History curriculum as a whole, placing particular emphasis on source analysis and essay writing, the two skills necessary for success on the IB History

Exam (completed at the end of the IB HL2 course). The IB HL2 course also continues the IB HL1's multi-dimensional approach to content through textual, audio-visual, musical and artistic media and intensive inquiry-based discussion. The IB HL2 course fine-tunes students' capabilities to interpret and understand historical and contemporary issues. Upon completion of this course, students should have the confidence and capacity to find success in any college- level history course and, more importantly, to explore and comprehend any national or global issue that has its origins in the twentieth century.

IB Psychology (Higher Level)

Grades II and I2, two-year course, I credit each year

Psychology is defined as the scientific study of behavior and mental processes. By developing an understanding of the biological, social, and cultural influences on human behavior, students will be able to evaluate different explanations of why humans act the way they do. The IB syllabus pursues this understanding primarily through biological, cognitive and socio-cultural levels of analysis, while also exploring abnormal and developmental perspectives, health, sports psychology and the psychology of human relationships where time and choice permit. The investigation of each level will focus on its historical and cultural context, key concepts, basic assumptions, methodology, strengths and weaknesses, and application. Students study research methodology and replicate an experimental study which will serve as their internal assessment, and they will read and discuss studies such as Roger Sperry's split brain experiments, Freud's theories of personality, Pavlov's classically conditioned dogs, Elizabeth Loftus and the implantation of false memories, Ebbinghaus' discovery of the learning curve, twin studies that explore "nature vs nurture" and the role of free will and determinism. The course's focus on experimental research will place a large emphasis on the scientific method and surrounding ethical issues. Through a thorough exploration of brain development, neurotransmitters, memory, language, emotions, stress, mental illness, and learning, students will develop an awareness of how the applications of psychology in everyday life are derived from psychological theories.

IB Global Politics (Standard Level I) Grade II, I credit

Global Politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues. We will explore fundamental political concepts such as power, equality,

sustainability, and peace in a range of contexts. We will develop an understanding of the local, national, international, and global dimensions of political activity and processes.

The IB Global Politics SLI course lays a foundation of understanding of the main political theories of realism, liberalism, and constructivism. This will allow us to create structure and

give context and background to the issues discussed. The foundational unit explores the nature of power, the operation of the state, and the function and impact of international organizations. We will also discuss topics from other units: Human Rights, Development and Peace and Conflict with an emphasis on the latter. The class is structured to provide as many experiential opportunities to engage with the material. By using games, simulations, and debates, the students will not only discuss politics but will also have to do and experience politics.

Students will explore all issues at different levels of analysis ranging from the community level all the way to the global level. They will also be challenged to approach politics through different group and individual perspectives. This will allow them to solidify their own understanding of the world while at the same time expanding their outlook.

IB Global Politics (Standard Level 2) Grade 12, 1 credit

The IB Global Politics SL2 course encourages students to continue challenging their understanding of the world by developing international perspectives, fostering a concern for global issues, and raising students' awareness of their own responsibilities at a local, national and international level. This year provides a more in depth discussion of the Human Rights and Development units. Although a personally, culturally challenging course, it is also highly rewarding in broadening understanding and engagement with those surrounding the student. During the course, the students will also participate in an Engagement Activity which requires them to participate in either Model UN in Philadelphia or our international Model UN trip. This activity will allow them to: experience the dynamics of real world politics by participating in the discussion and increase understanding of the political issue and the stakes for all involved by engaging with other students interested in the same issue.

MATHEMATICS

Each mathematics course is designed to help students develop traits of resourcefulness, creativity, imagination, perseverance, and curiosity. The mathematics department believes that each student need to be an active learner, so students are encouraged to speak and write about mathematics as they acquire knowledge and understanding of problem solving, processes, facts, and concepts.

Four years of mathematics are required for graduation from St. Paul's School. There are different courses available at each level so that each student can be placed in a course that is appropriate for his individual level of development and achievement. All students in the Upper School will become proficient at using calculator technology as a support to their learning.

Algebra I

Grade 9, I credit

The Algebraic skills introduced in this course are learned in the context of solving problems drawn from many areas of the student's real world experiences. Through the use of fundamental mathematical ideas and methods, students develop an understanding of variables, expressions, equations, functions (primarily linear), relations, systems of equations, and equivalence. Graphing calculators will be used to provide graphical and numerical illustrations and solutions to augment algebraic ones. The course leads into Algebra 2, with the introduction of quadratic equations and functions.

Geometry

Grade 9, I credit Prerequisite: Algebra I

All Upper School students are required to take a year of geometry. The geometry course is based on plane Euclidean Geometry and uses an inductive approach to enable students to understand the concepts and vocabulary of geometry with heavy integration of algebra throughout the course. Students are encouraged to discover geometric facts through hands on activities (including constructions) both individually and in groups. The course allows students to analyze the properties of one, two- and three-dimensional objects before making conjectures and solving problems related to triangles, quadrilaterals, circles, areas, and volumes, while introducing basic concepts of logic and formal proof.

Geometry Honors

Grade 9 or 10, Icredit Prerequisite: Algebra I

All Upper School students are required to take a year of geometry. The intensive geometry course is based on plane Euclidean Geometry and uses an inductive approach to enable students to understand the concepts and vocabulary of geometry with heavy integration of advanced algebraic techniques and right-triangle trigonometry throughout. Students are encouraged to discover geometric facts through hands on activities (including advanced constructions) both individually and in groups. The course allows students to analyze the properties of two- and three-dimensional objects before making conjectures and solving problems related to triangles, quadrilaterals, circles, areas, and volumes. The honors course strongly emphasizes logic and formal proofs.

Algebra 2

Grade 10, 11, 1 credit Prerequisite: Algebra 1 and Geometry

The Algebra 2 course starts with a review of the algebraic concepts learned in Algebra I.

The curriculum expands on the numbers systems studied in the Algebra course and takes the study of polynomials, factoring, and rational expressions to the next level. Students move on to study linear functions in greater depth before moving on to the quadratic function and the rational function. In addition students will study exponents, solving exponential equations, the exponential function, radical, and an introduction to logarithms. Students do an introduction to trigonometry which will continue in their next course of study.

Algebra 2 Honors

Grade 10: I credit Prerequisite: Algebra I and Geometry

A student who has performed well in the Algebra I course and who is recommended by the Algebra I teacher will be placed in the Algebra 2 Honors course. The Algebra 2 course starts with a review of the algebraic concepts learned in Algebra I. The curriculum expands on the numbers systems studied in the Algebra course and takes the study of polynomials, factoring, and rational expressions to the next level. Students move on to study linear functions in greater depth before moving on to the quadratic function and the rational function. In addition students will study exponents and the exponential function, logarithms and the logarithmic function, radicals, complex numbers, introductory trigonometry, sequences and series, and function transformations.

Precalculus

Grade IO or II: I credit Prerequisite: Algebra 2

For students who have completed Algebra 2, this course is challenging but moderately paced. Topics include trigonometry, basic analytic geometry, and elementary and transcendental functions, with an emphasis on domain and range of functions, complex numbers, and basic algebraic concepts that are fundamental to success in calculus. This course requires higher-level abstract thinking, and, whenever possible, students study functions from all four perspectives: verbally, analytically, graphically, and numerically. The course is designed to prepare the students for future course work in mathematics such as calculus and statistics.

Precalculus Honors

Grade 10: I credit Prerequisite: Geometry Honors, Algebra 2 Honors and teacher recommendation.

A student who has performed exceptionally well in the prerequisite courses mentioned above and who has been recommended by a previous teacher, will be considered for the Honors Precalculus course. This course is intended to prepare students for the two-year IB Math Higher Level course. This is a fast-paced, demanding course that covers the following topics in depth: Functions and relations and function transformations, logarithms, rational functions, sequences and series, trigonometry, complex numbers, linear modeling and statistics and probability. In addition, students will be engaged in a number of projects that will prepare them for the internal exploration required for the IB Math HL course.

Integrated Mathematics I

Grade II, I credit Prerequisite: Algebra 2

This course is designed to provide a comprehensive review of Algebra topics, to strengthen the Algebra and Geometry skills learned in earlier courses, and to explore additional topics such as probability, functions, trigonometry, matrices, and symbolic logic. The course will help students enhance their reasoning and problem-solving techniques and skills. This course will also include standardized test-type problems throughout the year.

Integrated Mathematics II

Grade 12, I credit

This course is an introduction to statistics with probability. It will be emphasized that students should seek to know and understand the logic behind selecting and using different probabilistic and statistical procedures – and therefore gain an understanding and appreciation for the importance of the underlying assumptions of those procedures. Students will work with real data and conduct statistical analyses with the use of widely available technology (graphing calculator, Excel, etc.) Computation and formula memorization are de-emphasized.

IB MATHEMATICS SUMMARY OF COURSES AVAILABLE

Because individual students have different needs, interests and abilities, there are four different courses in mathematics. These courses are designed for different types of students: those who wish to study mathematics in depth, either as a subject in its own right or to pursue their interests in areas related to mathematics; those who wish to gain a degree of

understanding and competence to understand better their approach to other subjects; and those who may not as yet be aware how mathematics may be relevant to their studies and in their daily lives. Each course is designed to meet the needs of a particular group of students. Therefore, great care should be taken to select the course that is most appropriate for an individual student. In making this selection, individual students should be advised to take account of the following factors:

• their own abilities in mathematics and the type of mathematics in which they can be

- their own interest in mathematics and those particular areas of the subject that may hold the most interest for them
- their other choices of subjects within the framework of the Diploma Programme
- their academic plans, in particular the subjects they wish to study in future
- their choice of career.

Teachers are expected to assist with the selection process and to offer advice to students.

Mathematics Analysis and Approaches

(Referred to as Math AA SL and Math AA HL)

The Analysis and Approaches course is designed for students who wish to develop their mathematical skills in a purer context. Most students taking that Analysis and Approaches course would likely go on to study courses at the tertiary level that would include more mathematical content. Technology is used to enhance the teaching of some concepts, but students will not have the use of technology on all parts of the final exam. The course curriculum includes topics in Algebra, Geometry, Statistics, Trigonometry, and Calculus, and includes a Mathematical Exploration

Mathematics Application and Interpretation

Referred to as Math AI SL

The Mathematics Applications and Interpretation SL course is designed for students who are interested in the application of mathematics in everyday life. Technology is widely used in the course to explore mathematical models. The curriculum includes the study of topics in Algebra, Statistics, Trigonometry, and Calculus, and includes a mathematical exploration.

SCIENCE

Our students SEEK TRUTH, KNOWLEDGE, and EXCELLENCE through authentic learning experiences designed to develop, value, and apply a scientific mindset.

The philosophy of the St. Paul's School Science program is to develop global citizens who use scientific skills to make evidence-based decisions and effect change for the good of

society. In keeping with the developmental appropriateness of our K-12 program, students will gain an appreciation of the relationship between science and the world around them. Our students develop scientific reasoning skills, while fostering mindsets of discovery and curiosity, to pursue their passions.

Our students LIVE BY FAITH, COMPASSION, and INTEGRITY by utilizing effective scientific reasoning to understand, evaluate and interpret when engaging with the world around them.

Integrated Science 9

Grade 9, I credit

This is the first part of a two-year sequence aimed at developing the necessary knowledge base and skill set for success in science and engineering. The course will cover core content in physics, engineering, chemistry and biology with an emphasis on showing the links between the disciplines and their applications to everyday situations. Topics covered in 9th grade include: kinematics, dynamics, the particle model of matter, thermal energy and heat transfer, structure of atoms, chemical energy, and light, matter, and metabolism. Scientific process is also an important aspect of this course. Students will learn engineering design and methodology, experimental design, data analysis, error analysis and the additional mathematical skills necessary for higher level work in science and engineering.

Integrated Science 10

Grade 10, I credit

The 10th grade Integrated Science course is the second part of a two-year sequence aimed at developing the necessary knowledge base and skill set for success in science and engineering. The course will cover core content in physics, engineering, chemistry and biology with an emphasis on showing the links between the disciplines and their applications to everyday situations. Topics covered in 10th grade include: motion and forces, simple machines, evolution, cell structure, molecular genetics. As in the 9th grade, scientific process is an important aspect of this course, emphasizing experimental design and analysis, and the additional mathematical skills necessary for higher-level work in science and engineering.

IB Biology (Higher Level)

Grades II and I2, two-year course, I credit each year

During the IB Biology HL course, students will become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. The course will provide students with opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers, and evaluate and communicate their findings.

The following topics comprise the core of the curriculum:

- I. Cell biology
- 2. Molecular biology
- 3. Genetics
- 4. Ecology
- 5. Evolution and biodiversity
- 6. Human physiology
- 7. Nucleic acids

- 8. Metabolism, cell respiration and photosynthesis
- 9. Plant biology
- 10. Genetics and evolution
- II. Animal physiology

Students in IB Biology work with students in other IB science classes to design interdisciplinary experimental projects (the G4 Project).

IB Chemistry (Standard Level)

Grades II and I2, two-year course, I credit each year

The IB Standard Level Chemistry course enables students to develop a wide range of practical skills and to increase facility in the use of mathematics. Both theory and practical work will be undertaken by students as they complement one another naturally, both in school and in the wider scientific community. The course encourages students to develop interpersonal

and information technology skills, which are essential to life in the 21st century.

The following topics comprise the core of the curriculum:

- I. Stoichiometric relationships
- 2. Atomic structure
- 3. Periodicity
- 4. Chemical bonding and structure
- 5. Energetics/thermochemistry
- 6. Chemical kinetics
- 7. Equilibrium
- 8. Acids and bases
- 9. Redox processes
- 10. Organic chemistry
- II. Measurement and data processing

Students in IB Chemistry work with students in other IB science classes to design interdisciplinary experimental projects (the G4 Project).

IB Computer Science (Standard Level) Grades II and I2, two-year course, I credit each year

The IB Computer Science SL course is above all about designing and implementing solutions to problems. Students will learn to think critically, methodically, and computationally. While we'll be uncovering how computers, networks, and the Internet work, this course is really about information – how we think about it, represent it, and process it.

Over the two years of this course, students will program in the languages of Scratch, C,

Processing, and Python, with the majority of time spent on Python and Processing. The focus is on writing text-based and graphical user interface games. We will also spend some time on basic robotics.

Students can take this course without any prior programming experience.

IB Environmental Systems and Societies (Standard Level)

Grades II and I2, two-year course, I credit each year

The prime intent of this course is to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students' attention can be constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues.

IB Physics (Higher Level)

Grades II and I2, two year course, I credit each year

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies. Despite the exciting and extraordinary development of ideas throughout the history of physics, observations remain essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations. Besides helping us better understand the natural world, physics gives us the ability to alter our environments. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject. During the IB Physics HL course. students will have many opportunities to develop manipulative skills, design investigations, collect data, analyze results and evaluate and communicate their findings.

The following topics comprise the core of the curriculum:

- I. Measurements and uncertainties
- 2. Mechanics
- 3. Thermal physics
- 4. Waves
- 5. Electricity and magnetism
- 6. Circular motion and gravitation
- 7. Atomic, nuclear and particle physics

- 9. Wave phenomena
- 10.Fields
- II.Electromagnetic induction
- 12. Quantum and nuclear physics

In addition, students will study one from the following list of optional areas:

- Relativity
- Engineerin g physics
- Imaging
- Astrophysics

Students in IB Physics work with students in other IB science classes to design interdisciplinary experimental projects (the G4 Project).

IB Physics (Standard Level) Grades II and I2, two year course, I credit each year

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The following topics comprise the core of the curriculum:

- I. Measurements and uncertainties
- 2. Mechanics
- 3. Thermal physics
- 4. Waves
- 5. Electricity and magnetism
- 6. Circular motion and gravitation
- 7. Atomic, nuclear and particle physics
- 8. Energy production

In addition, students will study one from the following list of optional areas:

- Relativity
- Engineering physics
- Imaging
- Astrophysics

Students in IB Physics work with students in other IB science classes to design interdisciplinary experimental projects (the G4 Project).

IB Design Technology (Standard Level)

Grades II and I2, two year course, I credit each year

Both science and technology have a fundamental relationship with design. Technology preceded science, but now most technological developments are based on scientific understanding. Traditional technology comprised useful artifacts often with little understanding of the science underpinning their production and use. In contrast, modern technology involves the application of scientific discoveries to produce useful artifacts. The application of scientific discovery to solve a problem enables designers to create new technologies and these new technologies, in turn, can impact on the rate of scientific discovery. The aim of the DP design technology course is to foster the skill development in students required to use new and existing technologies to create new products, services and systems.

The following topics comprise the core of the curriculum:

- Human factors and ergonomics
- Resource management and sustainable production
- Modelling
- Raw material to final product
- Innovation and design
- Classic design

Anatomy Grade II and I2

This course explores the structure and function of the human body at multiple levels: individual cells, their coming together to form tissues, the organization of tissues into organs, organs working together as parts of organ systems, and finally how those organ systems support one another to maintain the body. Normal structure and function are presented as a starting point, and then the effects of disease processes on structure and function are examined.

Forensics

Grade 12

Forensic Science is the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Specifically, forensic science deals with the analysis of evidence. This course uses the areas of biology, chemistry, physics, and geology to determine the evidential value of crime-scene and related evidence. Specific topics include: fingerprints, toxins, hair and fibers, ballistics, and DNA. Lab activities accompany each topic. Noteworthy "famous" cases are discussed. Students may elect to take only the first semester and receive ½ credit.

Introduction to Computer Science

Grade 10, ½ credit

This Introduction to Computer Science course is for students interested in developing software applications. Programming in Python, Processing, and Arduino, students will create interactive applications, including basic robotics. Students will learn problem solving, software design, debugging strategies, and algorithms. Projects will focus on games and electronics systems using open-source tools.

Introduction to Engineering

Grade IO, ½ credit

The Introduction to Engineering course will introduce students to some of the major concepts and practices in engineering today. The course will impart content and skills related to the following units: mechanical design, electricity and electronics, energy systems, robotics, and general design. Students will design and construct prototypes to satisfy

challenges. The highest-level mathematics required is Algebra I, though some Algebra II concepts will be introduced and used in the course as well.

AP Biology (offered at SPSG) Grade II and I2

This course is designed to engage students in the study of biology at the college level. Students study topics such as cell and molecular biology, genetics, organismal biology, ecology, and evolution. Classes are taught through hands-on learning, class discussion, lecture, and independent research. Laboratory experiences utilize open inquiry methods in which students design their own research, engage critical thinking skills and problemsolving skills, and develop their curiosity for further study of a particular topic. Students engage in research design, basic laboratory skills used in a modern biology laboratory, mathematics, and statistics. The curriculum is synchronous with the College Board AP curriculum and culminates with the AP Biology Exam.

AP Chemistry (offered at SPSG) Grade II and I2

The AP Chemistry course provides students with a foundation to support future advanced course work in chemistry. Through inquiry-based learning, students develop critical thinking and reasoning skills. Students cultivate their understanding of chemistry and science practices as they explore the following topics: descriptive inorganic chemistry, atomic and molecular structure, acid-base reactions, oxidation-reduction reactions, chemical bonding, stoichiometry, solution chemistry, chemical equilibrium, chemical kinetics, electrochemistry, and states of matter. This course also includes an introduction to organic and nuclear chemistry. This course requires that 25 percent of the instructional time provides students with opportunities to engage in laboratory investigations. AP Computer Science?

MODERN LANGUAGES

Chinese

Mandarin Chinese is offered as part of our coordinated language program with St. Paul's School for Girls. The program provides students an excellent cultural opportunity to study the world's most spoken language. Chinese I introduces students to standard Mandarin pronunciation, tones, and basic grammatical structures through oral, aural, and written exercises. In Chinese 2, students learn more of the vocabulary and grammar that will enable them to survive and thrive in a Chinese setting. Students will continue to refine their tones and listening comprehension. They will also increase the number of characters they have mastered to the point where, at the end of the year, they will be able to read simple newspaper articles. After completing IB Chinese 3 and IB Chinese 4, students will be eligible to take the IB Mandarin ab initio examinations.

French

French is offered as part of our coordinated language program with St. Paul's School for Girls. Classes are taught with the greatest emphasis placed on communication. Students read and write in authentic French, and French is the language of the classroom as much as possible. In order to reflect the diversity of the French-speaking world, students read, study, and learn about francophone Africa, the Caribbean, Canada, Louisiana, and parts of Asia where French is spoken. To enhance the French program, students are given the opportunity to participate in a bi-annual home-stay program in France. Students also participate yearly in the National French Contest, and St. Paul's has a history of winners on the state and national levels. Students can be prepared to take examinations in IB French ab initio, IB French B SL, or IB French B HL.

German

St. Paul's Upper School offers German from level I through 4. Students in levels 2 through 4 may qualify to participate in Honors courses. In the first two years, students are introduced to a wide range of vocabulary and the essentials of German grammar. In years three and four, students continue to expand their vocabulary while also honing their grammar skills and adding complex structures to their repertoire. Throughout the German program, students are immersed in the culture of the German-speaking world. Speaking and listening skills are emphasized every year, but during the last two years in particular the students also learn to express themselves in a variety of writing formats. Students participate

in numerous German events (such as the winter festival of Nikolaustag) and language competitions during the year and have the opportunity to compete for summer and yearlong scholarships to live and study in Germany. Many students participate in the school's biannual exchange to Münster, Germany. Students can be prepared to take examinations in IB German ab initio or IB German B SL.

Japanese

St. Paul's offers Japanese from levels I - VI. Japanese levels I - III emphasizes the mastery of fundamental vocabulary and grammar, which are necessary for everyday communication while introducing interesting Japanese custom and tradition. Japanese IV and V further develop the four language skills and deepen students' knowledge of Japanese culture and society. Japanese VI is an independent study course where advanced language students can enjoy Japanese learning in an immersed setting with authentic materials. Students are well prepared to take IB Japanese B (Standard Level) or IB Japanese ab initio (SL) exam at the end of their senior years. Additionally, students are given an opportunity to assess their proficiency at a national language exam.

St. Paul's School has exchange programs with Gakushuin Boys' Senior High School in Tokyo, Japan, and the Rikkyo Niiza High School in Saitama, Japan. We welcome one exchange student from each school for the entire school year. Furthermore, St. Paul's students have the opportunity to study for 2 weeks at Rikkyo (in alternating years) or for 4 months at Gakushuin each year.

Spanish

St. Paul's Upper School offers Spanish from level I through 5. IB Spanish B Standard and Higher Levels and IB Spanish ab initio are offered for both IB diploma candidates and any student wishing to obtain an IB certificate. The Spanish program begins with an introduction to essential vocabulary and basic sentence structure. Particularly at the beginning levels, speaking and listening skills are emphasized. Writing and reading skills gain significantly in importance as students move from one level to the next. Students also learn a great deal about the cultural heritage of the Spanish-speaking world and analyze similarities and differences in relation to the United States. As their mastery of the basics deepens, Spanish students begin their study of the different tenses of Spanish grammar as well as the various nuances in vocabulary. Students engage in interviews, role playing, debates, and skits as part of the highly-interactive classroom. In the later years of Spanish, students take a more in-depth look at Spanish and Latin American society in extensive units on history, politics, music, and literature. Students in Level 2 Honors and higher are eligible to participate in the National Spanish Exam and are encouraged to take part in our bi-annual homestay program in Sitges, Spain.

RELIGIOUS STUDIES/THEORY OF KNOWLEDGE

World Religions Grade 10, ½ credit

The World Religions course is an introduction to the academic study of religion and of world religions with an emphasis on the religious traditions of Judaism, Islam, Christianity, Hinduism and Buddhism. Minor religions and some new religious movements will be briefly explored. The course examines the historical evolution, the fundamental doctrines and beliefs, the practices, institutions, and cultural expressions of these religious traditions.

As we explore each religion individually, we will be guided by three fundamental questions that can be answered according to the religion in question:

- I) What is the human condition?
- 2) Where are we going?
- 3) How do we get there?

In answering these questions, we will also remain aware of the great diversity of expression and beliefs within each religious tradition. No religion or worldview can be completely defined and delimited, but understanding the basic underpinnings of these traditions is an important starting point in an ever increasingly pluralistic society. World Religions is a required course for all 10th grade students.

IB Theory of Knowledge I

Grade II, ½ credit

TOK is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It is a core element which all Diploma Program students undertake and to which all schools are required to devote at least 100 hours of class time. TOK and the Diploma Program subjects should support each other in

the sense that they reference each other and share some common goals. The TOK course examines how we know what we claim to know. It does this by encouraging students to analyze knowledge claims and explore knowledge questions. A knowledge claim is the assertion that "I/we know X" or "I/we know how to Y", or a statement about knowledge; a knowledge question is an open question about knowledge. A distinction between shared knowledge and personal knowledge is made in the TOK guide. This distinction is intended as a device to help teachers construct their TOK course and to help students explore the nature of knowledge.

While there are arguably many ways of knowing, the TOK course identifies eight specific ways of knowing (WOKs). They are language, sense perception, emotion, reason, imagination, faith, intuition, and memory. Students are briefly introduced to each WOK during their first quarter of study, and are encouraged to examine the strengths and weaknesses of the various WOKs.

The WOKs have two roles in TOK:

- they underlie the methodology of the areas of knowledge
- they provide a basis for personal knowledge.

Discussion of WOKs will naturally occur in a TOK course when exploring how areas of knowledge operate. Since they rarely function in isolation, the TOK course explores how WOKs work, and how they work together, both in the context of different areas of knowledge and in relation to the individual knower.

Areas of knowledge (AOK) are specific branches of knowledge, each of which can be seen to have a distinct nature and different methods of gaining knowledge. In 11th grade, students focus on history, ethics, and religious knowledge systems. Students are encouraged to explore which ways of knowing come into play in each of these areas of knowledge, and why we might rely on some WOKS and not others depending on the AOK.

IB Theory of Knowledge I is a required course for all I Ith grade students.

IB Theory of Knowledge 2

Grade I2, ½ credit

IB TOK is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. The TOK course examines how we know what we claim to know and it does this by encouraging students to analyze

knowledge claims and explore knowledge questions. TOK is a core element of the IB Diploma and all Diploma candidates are required to register for IB TOK in both 11th and 12th grade.

While there are arguably many ways of knowing, the TOK course identifies eight specific ways of knowing (WOKs). They are language, sense perception, emotion, reason, imagination, faith, intuition, and memory. In the second year of IB TOK, reason, sense perception, memory and emotion are studied in depth and in close relation to the areas of knowledge that form the focus of the course. Since they rarely function in isolation, the course explores how WOKs work, and how they work together, both in the context of different areas of knowledge and in relation to the individual knower.

Areas of knowledge are specific branches of knowledge, each of which can be seen to have a distinct nature and different methods of gaining knowledge. TOK distinguishes between eight areas of knowledge: mathematics, the natural sciences, the human sciences, the arts, history, ethics, religious knowledge systems, and indigenous knowledge systems. During the IB TOK 2 course, students cover mathematics, natural sciences and the arts.

There are two assessment tasks in the IB TOK course: an essay and a presentation. The essay is externally assessed by the IB, and must be on any one of the six prescribed titles issued by the IB for each examination session. The maximum word limit for the essay is 1,600 words. The TOK essay is written during January and February of the senior year. The presentation can be done individually or in a group, with a maximum group size of three. Approximately 10 minutes per presenter is allowed, up to a maximum of approximately 30 minutes per group. The TOK presentation is prepared during February and March of the senior year.

ARTS

The Arts program in the Upper School is a vital, integral part of our curriculum. The development of basic skills in the arts can be used during one's life as a means of communication, expression, and enjoyment. A student's program in the arts should include opportunities to develop and express ideas, as well as recognize and understand the artistic achievements of past and present civilizations. Study in the arts can also assist the student in his cognitive development by integration of art and other subjects. This approach enables students to more fully understand the world they inhabit and helps them contribute to society in a personally satisfying manner.

Visual Art I Grades 9-12, 1/2 credit

This one-semester course is offered both fall and spring semesters to all Upper School

students. This introductory art class focuses on art concepts and problem-solving skills through responses to observed environmental elements in collage, pastel, charcoal, and pencil.

Digital Art I Grades 9 and 10, ½ credit

This one-semester course is offered both fall and spring semesters to all Upper School students. This introductory art class incorporates art concepts and problem-solving skills, symbols, typography, illustration, and portfolio development. Students will use traditional art media and Adobe Photoshop.

Digital Photography I and 2

Grades 10-12, 1/2 credit Prerequisites: Graphic Art I

This one-semester course is offered to students in grades 10-12 who have completed Graphic Art I. Students will explore creating and editing digital photographs using the computer. Cropping, exposure, composition, special effects, and more will be covered. Students who have completed Digital Photography I will work on assignments to enhance their exploration of the skills and concepts taught in the level one class.

Visual Art 2 Grades 10-12, 1/2 credit Prerequisites: Visual Art I

This one-semester course is offered to students in grades 10-12 who have completed Visual Art I. This course continues to develop art concepts and problem-solving skills in drawing from observation. Students begin to explore colors in light and shadow with a variety of materials, including drawing media, watercolor, and print-making.

Graphic Design

Grades 10-12, 1/2 credit Prerequisites: Digital Art I

This one-semester course is offered to students in grades 10-12 who have completed Graphic Art I. This course continues the exploration of art concepts and problem-solving skills in the areas of drawing, illustration, photography, and manipulated computer images. Students will use traditional media, continue to build their Adobe Photoshop skills, and they will be introduced to Adobe Illustrator.

Graphic Art 2/3

Grades 10-12, 1/2 credit Prerequisites: Graphic Design I & Visual Art I or Graphic Art I & Visual Art I

This one-semester course is offered to students in grades 10-12 who have completed

Graphic Design and Visual Art I OR Digital Art I and Visual Art I. This course continues the exploration of art concepts and problem-solving skills in the areas of drawing, illustration, photography, and manipulated computer images. Students will use traditional media, continue to build their Adobe Photoshop skills, and they will be introduced to Adobe Illustrator. Students who have completed Graphic Design 2 or Graphic Art 2 will work on assignments designed to enhance their skills in Adobe Photoshop and Adobe Illustrator.

Visual Art 3

Grades II-I2, I credit Prerequisites: Visual Art 2

Students develop an advanced portfolio, continue to explore the color in light and shadow, as found in portraits, figures, and landscapes, and begin to develop a personal direction in preparation for AP Studio Art. This course also provides the opportunity for students to explore relationships with artists as mentors and counts as the first semester of IB Visual Arts (Standard Level).

Visual Art 4

Grades II-12, 1/2 credit Prerequisites: Visual Art 3

Students will continue to develop their skills in visual art from observation and begin to explore personal directions in preparation for the AP portfolio concentration. This course counts as the second semester of IB Visual Arts (Standard Level I).

AP Studio Art

Grade I2, I credit Prerequisites: Visual Art 3 and 4

This is a full-year course open to seniors only who have completed Visual Art 3 and 4 or those with the instructor's permission. This course is a student-designed, independent investigation with an artist. Students create an extensive body of work centered around a self-identified theme and will submit a portfolio for review to the College Board of the AP Exam. This course is the second year of IB Visual Arts (Standard Level I).

THEATRE

Acting I

Grade 9-12, 1/2 credit

Acting I introduces students to the elements of scene work, including action, motivation, subtext, conflict and resolution. With a focus on self-discovery and truth in performance,

students are encouraged to make bold choices and take risks on stage and off. Students will learn about and experiment with physical theatre as a way to build ensemble and tune the actor's instrument with nuance and specificity. Improvisation skills will be developed throughout the course to enable students to gain confidence, strengthen concentration, foster creativity and develop empathy and listening skills. Throughout the course, exercises will encourage physical freedom and a sense of truth. Acting I also includes an introduction to the basic elements of the Stanislavski system. The semester's work concludes with a showcase of scenes.

Acting II

Grades 9-12, 1/2 credit Prerequisite: Acting I or Permission from instructor

This course focuses on developing the fundamental skills used in rehearsing and performing scenes from classic and contemporary dramatic literature. Through an investigation of various acting techniques, students acquire the tools and skills necessary for honest characterization. Students explore acting through the perspective of the Stanislavski technique and the methods developed by Uta Hagen. This course focuses on scene study in comedy and drama and places specific focus on the actor's instrument: vocal and physical strength, control, and expression. Acting II culminates in a showcase of scenes prepared and rehearsed throughout the course.

Acting III

Grades 10-12, ¹/₂ credit Prerequisite: Acting I and Acting II or with Permission from instructor

This advanced scene study class allows the students to build on the tools they gained in Acting I and Acting II. Students aim to stretch their abilities as they attack more challenging acting exercises and scenes. The course introduces actors to new theatre styles and traditions, including Commedia Dell Arte, mask work, Restoration Comedy, classical and poetic text, and Absurdist theatre. With a specific focus on physical and vocal expression, the course aims to push actors outside of their comfort zone in order to gain full capacity for characterization and widen their range as actors. Students work on creating characters in monologues and scenes from classical and contemporary plays, with specific attention to physical and vocal expression, and honest emotional connection. Acting III culminates in a showcase of scenes prepared and rehearsed throughout the course.

Musical Theatre

Grades 10-12, 1/2 credit Prerequisite: Acting I & Acting II or permission from instructor

This course is designed to train students in the skills of the actor/singer. There is an introduction to the American Musical Theatre repertoire, concentrating on ensemble and

solo singing, with an emphasis on vocal technique, diction, and musicality. Movement and musical theatre dance styles are also introduced. A combination of acting, voice, and movement exercises is used to help students explore and develop their total instrument. Students work on individual musical theatre pieces, with instruction focusing on imaging, phrasing, articulation, and audition technique. Students are encouraged to arrange for outside vocal coaching. This course culminates in the Musical Theatre Showcase, a presentation of Broadway musical scenes and songs selected by the instructors.

Advanced Techniques in Acting

Grades II-I2, ½ credit

Prerequisite: Acting III or permission from instructor

Intended for advanced acting students, this course focuses on in depth scene and character work from contemporary plays of the 20th and 21st centuries. Students explore a variety of plays and playwrights to understand trends and style. Rigorous work in textual analysis and character development are the primary focus. Practical techniques in the selection, preparation, and performance of scene work. The ultimate goal of the course if connection to scene partner, listening work, and working off of impulse. The course will provide an improved physical awareness and coordination, breath control, concentration, and general body conditioning, as the foundation for character embodiment. Using the exploration techniques of Tadashi Suzuki, Anne Bogart, Sanford Meisner, Laban Movement Analysis, Alexander Technique, and Jerzy Grotowski as a framework, students will find new ways to create and observe the function of the human body and mind in creative expression. The course culminates with a showcase of scene work and independently created solo theatre pieces. This course culminates in the Advanced Acting Showcase of solo performances and scenes

The Director's Lab*

Grades II-12, I/2 credit (Fall Semester) Prerequisite - Advanced Techniques in Acting or permission from instructor

This course continues the multicultural, multi-discipline study of theatre arts and builds on the experiences and performance work completed in the prerequisite courses. Student directors learn through script analysis, concept development, group discussion and presentation, actor-director communication, and rehearsal planning and execution. Though the focus lies primarily in role of the director, students will also explore the viewpoint and process of the actor, designer, and dramaturge. Directors improve their communication skills through performance critique and ensemble based work. Students also engage in exercises that focus on staging, composition, and working in a variety of theatre spaces in order to develop the ability to problem solve and adapt to the challenges directors often face with each new project. The second half of the course allows student the opportunity to test their directing skills both theoretically and practically. Students work to create a Director's Notebook, for which they choose a published play text they have not previously studied and develop ideas regarding how it could be staged for an audience. The course culminates in a Director's Showcase with a presentation of scenes directed by the students in the class.

Ensemble Theatre Company

Grade II-I2, I credit

Prerequisite: Advanced Techniques in Acting and Director's Lab or permission from instructor

This course offers actors, directors, designers and writers a hands-on experience of developing and working as an ensemble theatre company. The first semester is a practical, on-your-feet introduction to collaborative and devised theatre-making. Students will be exposed to a variety of processes, including adaptation, group writing, found text, Viewpoints and Composition, improvisation, as well as methods of offering critical feedback on works-in-progress. Regarding their own pieces, students will be encouraged to use source material of great personal interest to them. The curriculum explores the successive phases of creating, rehearsing, and presenting assigned projects from a variety of starting points. Collaborative ability, communication skills, imagination, and risk-taking are the foundations for this rigorous coursework. This work will culminate in the generation, rehearsal, and performance of an original piece of devised theatre. The second semester builds on the creative processes explored in semester one, as students engage in an in depth exploration of the play production process, from initial readings and play analysis through design and production. All elements of production are explored, as students will take on roles as actors, directors, dramaturges and designers. Having selected the play for production, students choose to focus their time on one element of production design and work in teams to tackle the varying production tasks along the way. The course will culminate in the presentation of the spring main stage theatre production. While this course may require rehearsals outside of class time, students involved in athletics or other after school activities are still encouraged to enroll.

- * IB THEATRE I is comprised of Advanced Techniques in Acting and Director's Lab
- · ** IB THEATRE II is comprised of Ensemble Theatre Company

Technical Theatre I Grades 9-12, 1/2 credit No prerequisite

This course explores the world behind the scenes of live performance, including designing and implementation of scenery, properties, costumes, lighting, and sound.

Technical Theatre 2

Grades 9-12, 1/2 credit Prerequisite: Technical Theatre I

This course focuses on the principles of theatrical light and sound. The course begins with an exploration of the basic properties of light and sound, which includes a thorough discussion of the human perception of these two phenomena. Students then learn how the properties of light and sound can be controlled to achieve an artistic effect that supports the intent of the designer, director, and playwright. Methods include computer simulations, hands on experience in programming the light board and sound computer, attending and critiquing a professional performance, as well working on a school production. The course culminates with a lighting/sound design project.

MUSIC

Ninth Grade Singers Grade 9, I credit Prerequisite: audition or music faculty recommendation

A male-voice ensemble, Ninth Grade Singers seeks to provide a solid foundation to the upper school choral curriculum through daily performance and exploration of choral repertoire. Like subsequent offerings, this ensemble's goal is musical artistry with areas of emphasis to include: understanding posture and anatomy as applied to singing, developing breath support, building resonance throughout the two primary male registers, diction (with an introduction to Latin, German, French and other texts), vowel placement, sight-singing and ear-training, applying basic music theory & basic music history. Throughout this course, intermediate-level, meritorious, male-voice choral repertoire acts as the best curriculum and most direct path to proficiency of skills.

St. Paul's Singers

Grade 10, 1 credit Prerequisite: audition and music proficiency

This male-voice, choral ensemble strives to explore the multi-faceted areas of a successful Upper School music curriculum with continued exploration of vocal techniques and music literacy. With musical artistry as the goal, areas of emphasis include: understanding posture and anatomy as applied to singing, developing breath support, building resonance hroughout the two primary male registers, diction (with an introduction to Latin, German, French and other texts), vowel placement, sight-singing and ear-training, applying basic music theory & basic music history. Throughout this course, intermediate-level, meritorious, male-voice choral repertoire acts as the best curriculum and most direct path to proficiency of skills.

St. Paul's Concert Chorale

Grades 10-12, I credit (may be repeated for credit) Prerequisite: audition and music proficiency

Members of the St. Paul's Concert Chorale exhibit an advanced understanding of the choral arts prior to their acceptance. Though the curriculum is similar to that of the St. Paul's Singers, this ensemble rehearses and performs more difficult music with tremendous commitment to intonation, vowel modification, resonance building, advanced concepts of vocal placement, and continued strides in music literacy. This premiere ensemble is also the touring choir at St. Paul's School. Boys in this choir have performed in Iceland, Germany, Austria, and Czech Republic, to name only a few. Acceptance of a position in this ensemble requires singers to participate in all public performances, recording projects and tours (both national and international).

Route 81/Chamber Choir

Grades 10-12, 0 credits

Prerequisite: auditioned from St. Paul's Concert Chorale

This group of 9 to 14 singers rehearses and performs music spanning from the Italian Renaissance to the Beatles and beyond. They rehearse under the direction of Mr. Smedstad on Sunday evenings from 7:00-9:00 p.m. in the chapel. Their varied repertoire is performed both on and off campus. Whether singing chamber music for a choral concert or light-hearted arrangements at campus parties, this ensemble exhibits a particular dedication to the choral arts. Inquiries for Route 81 performances should be made to student leaders via emailing Mr. Smedstad for contact information.

IB Music (Standard Level)

Grades II and I2, two year course, I credit each year

The Standard Level Music course seeks to develop students' knowledge and potential as musicians, both personally and collaboratively. Students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notation, musical terminology and context. Through the course of study, students become aware of how musicians work and communicate. The performance aspect of the course is satisfied by the student's participation in the St. Paul's Concert Chorale.

Jazz Band

Grades 9-12, I credit (may be repeated for credit) Placement is based on grade/skill level, prior experience, and scheduling.

This course will engage students in the evolving genres of instrumental jazz and vocal music. The Jazz Band provides the opportunity to learn, record and perform Swing, Latin, Bossa Nova, Ballads and Rock. Students are introduced to concepts in jazz improvisation and will gain fundamental knowledge of chord and scale relationships. Major focus is placed on learning and communicating the "language" of Jazz, as well as understanding rhythmic and melodic phrasing. This class will develop musical independence by introducing the arranging of standards and modern material. Our band members will develop the skills necessary for live performance, as well as studio recording. We will perform at seasonal concerts, festivals and community events. Students who have prior experience on brass, winds, guitar, bass, strings, drums/percussion, and keyboards, as well as

other instruments and/or as solo vocalists may enroll, with the permission of the instructor.

DANCE

Movement for the Athlete

This one-semester course is designed specifically for the athlete to enhance and refine athletic performance through techniques and training traditional to dance. No dance experience is required. Students enrolled in this course will gain an increase in body awareness, flexibility, agility and balance, while also gaining an appreciation for the art of dance. Students will participate in the dance concert.

Dance 1/2

As an introductory semester-long dance course, students will study ballet, jazz, modern and contemporary dance at an advanced beginner level. This class is designed to prepare participants for Upper School level dance classes. The students' understanding of the performing art will culminate in a performance on stage in the Ward Center.

Dance 3/4

In this course, students will continue their study of ballet, jazz, modern and contemporary dance from Dance I at an intermediate level. Prior dance knowledge is preferred. This class will focus heavily on anatomy and musicality, strength building, and performance quality. This semester or year-long course will culminate in a performance on stage in the Ward Center.

Dance 5/6

An intermediate/advanced study of ballet, jazz, modern and contemporary dance techniques. Prior dance knowledge is preferred, as this class will move at a quicker pace and use dancers' understanding of the body to explore improvisational techniques. Students will study current dance choreographers and styles on a global level. This semester or yearlong course will culminate in a performance on stage in the Ward Center.

Inertia

(Recommended: 4 years of serious dance study/training)

Inertia represents the most dedicated dancers at The St. Paul's Schools. Inertia provides dancers opportunities to immerse themselves more fully in the performance components of the art by providing dancers with additional performance opportunities outside of the traditional SP/SPSG dance class, especially during the Winter and Spring Dance Concerts. The company performs new and classical repertoire, including having the opportunity to work with special artists in residence. Past guest artists have joined us from the Radio City

Rockettes, Alvin Ailey, and the Isadora Duncan Company. Dancers also have opportunities to attend or travel to outside dance workshops, festivals and performances such as The Maryland Dance Alliance Festival. This year-long course may be repeated for credit.