

**CURRICULUM:** The goal of the Honors 7<sup>th</sup> Grade Program is to provide a challenging curriculum in a technologically advanced learning program. It is designed to provide an educational opportunity in our high school for academically advanced students, grades 7 and up, so that they are able to take full advantage of our advanced placement and college in high school programs. Below is the curriculum for a 7<sup>th</sup> grade student.

-----**Curriculum**-----

**Scope of Honors 7<sup>th</sup> Grade Math Program:** The scope of the Honors 7<sup>th</sup> Grade math courses is to prepare the student for advanced concepts in mathematics, leading the student to participation in Honors Probability and Statistics, AP Calculus AB, and Honors Calculus BC.

**Pre-Algebra:** This course is designed to teach students to be successful mathematics problem solvers. Students who successfully complete this book will have the necessary preparation to be successful in Algebra I. This course will teach students to use variables and to solve single variable one-step equations. Emphasis will be placed on evaluating integers and exponents, operations with rational numbers, percents, and inequalities.

**Algebra I:** This course is designed to teach topics of Algebra I that include adding, subtracting, multiplying and dividing real numbers; performing the order of operations; solving equations and inequalities; writing functions; identifying linear functions; graphing linear equations; solving systems of equations by substitution and elimination; performing properties of exponents; adding and multiplying polynomials; factoring trinomials; adding, subtracting, multiplying and dividing radical expressions; and an introduction to adding, subtracting, multiplying, and dividing rational expressions

**English and Language Arts:** Students will develop the literacy skills, academic habits and strategies needed to succeed in challenging academic courses. Students will read, with a focus on meaning and analysis, from a variety of fiction and nonfiction texts. Students will also practice composition strategies, build an understanding of grammar, and develop focused vocabulary. The content covered is designed to prepare students for college-prep courses in high school.

**Life Sciences:** This course is an investigation into the life sciences. The students will be involved in an in depth, hands-on examination of each of the following topics: Experimental Design, the Human Body, Cell Biology and Disease, Genetics, Ecology, Evolution, Bioengineering. They will be challenged to develop critical thinking skills, to make decisions for themselves, to think like a scientist and to understand the life sciences as they relate to real life issues.

**World Geography and Cultures:** The purpose of this course is to introduce World Geography by the themes of history, economy, transportation, communication and population patterns and how they are impacted by an areas geography around the world. It is hoped that students will develop a better understanding of the world's diverse peoples, cultures, and countries, thus enabling them to become responsible world citizens.

**Religion: Salvation History 1 & 2:** Honors Religion is structured as a 2-year curriculum which seeks to establish a solid framework for salvation history through overviews of Sacred Scripture (Year 1) and Church History (Year 2). Students will familiarize themselves with key events, people and themes from significant periods of salvation history, with special time devoted to understanding the historical context and spiritual significance for each. The course will be supplemented by literary explications of key Christian themes, with an eye towards helping students appreciate and apply these themes in their own lives.

**World Languages** – Foreign language skills will be achieved through oral, written, listening and reading activities. Cultural awareness and understanding will also play an important role. Students will apply critical thinking skills while mastering the target language. All instructional activities guide students to proficiency in the language. Languages offered include: Chinese, French, and Spanish

**Health and Physical Education:** This year long course will combine Health and Physical Education. The Health portion of the course is designed to help students take an active role in protecting, maintaining, and improving their overall health. The physical Education portion of the class will allow the students the opportunity to participate in a

comprehensive program consisting of skill development, lead up games, team sports, individual sports, and physical fitness activities.

## **T.E.A.M. – TECHNOLOGY, ENHANCED ART AND MUSIC**

**iPads in Education:** This course is designed to support students as they are first introduced to BG's one-to-one iPad culture. Students learn to apply the creative and productive use of iPad technology for educational use.

### **Enhanced Art and Music:**

**Intro to Studio Art** – This course is an entry level studio art course designed to expose students to basic skills and concepts in drawing, painting, printmaking, textiles, and ceramics. Students will create original pieces of artwork, using a variety of mediums. This is a one semester course for the novice artist.

**Music** – This semester course provides the non-musician with the understanding of musical concepts necessary to appreciate many different genres of music. Students gain a knowledge of the concepts of music notation and analysis of the aural components of music. Covered also in the course are historical and contemporary periods, genres, and composers.

**Band:** This instrumental music course is an enhanced performance-practice course where students receive group instruction to hone their skills as instrumentalists in an ensemble setting. Skills include reading music, sight-reading, aural training, and mixed instrumental literature. This course requires attendance for some after-school rehearsals, as well as several numerous public performances outside of the regular school day.

**Advisory:** Students will develop their social, personal, and academic skills through advising and class activities. Students will use this class as a space to practice these skills and identify their strengths and weaknesses. This course is an aid to students in their development while in a fast-paced environment.

**CURRICULUM:** The goal of the Honors 8<sup>th</sup> Grade Program is to provide a challenging curriculum in a technologically advanced learning program. It is designed to provide an educational opportunity in our high school for academically advanced students, grades 7 and up, so that they are able to take full advantage of our advanced placement and college in high school programs. Below is the curriculum for an 8<sup>th</sup> grade student.

-----**Curriculum**-----

**Scope of Honors 8<sup>th</sup> Grade Math Program:** The scope of the Honors 8<sup>th</sup> Grade math courses is to prepare the student for advanced concepts in mathematics, leading the student to participation in Honors Probability and Statistics, AP Calculus AB, and Honors Calculus BC.

**Algebra I:** This course is designed to teach topics of Algebra I that include adding, subtracting, multiplying and dividing real numbers; performing the order of operations; solving equations and inequalities; writing functions; identifying linear functions; graphing linear equations; solving systems of equations by substitution and elimination; performing properties of exponents; adding and multiplying polynomials; factoring trinomials; adding, subtracting, multiplying and dividing radical expressions; and an introduction to adding, subtracting, multiplying, and dividing rational expressions

**Algebra II:** This course is designed to teach topics of Algebra II that include operations with equations and inequalities; linear relations and functions; systems of equations and inequalities; matrices; quadratic functions and inequalities; polynomial functions; radical expressions, equations and inequalities; advanced functions and relations; rational expressions, equations and inequalities.

**English and Language Arts:** Students will develop the literacy skills, academic habits and strategies needed to succeed in challenging academic courses. Students will read, with a focus on meaning and analysis, from a variety of fiction and nonfiction texts. Students will also practice composition strategies, build an understanding of grammar, and develop focused vocabulary. The content covered is designed to prepare students for college-prep courses in high school.

**Introduction to Chemistry and Physics:** A Natural Approach to Chemistry and Physics Principles and Problems: This course follows a guided-inquiry based instructional strategy that provides students with a direct experience with scientific processes and how they are related to their world. A comprehensive overview of the main themes in chemistry is presented that includes the atomic nature of matter, systems, temperature and energy. In depth coverage of the core concepts of chemistry such as atomic structure, the Periodic Table, compounds, molecules, solutions, bonding, and chemical reactions are taught. The physics component includes an extensive study into the science of kinematics and dynamics, waves, light, energy, and electricity. Algebra-based quantitative problem solving is an integral component. Instructional strategies include: science literacy, STEM, and critical thinking.

**World History:** The purpose of this course is to learn about the world's development from the rise of civilization up until the Enlightenment and Revolutions. All material covered will help students understand the significance and importance of how major events throughout the world such as the rise of Egypt, the decline and fall of Rome, feudalism, and wars and revolutions have shaped the world from the beginning of time to today.

**Religion: Salvation History 1 & 2:** Honors Religion is structured as a 2-year curriculum which seeks to establish a solid framework for salvation history through overviews of Sacred Scripture (Year 1) and Church History (Year 2). Students will familiarize themselves with key events, people and themes from significant periods of salvation history, with special time devoted to understanding the historical context and spiritual significance for each. The course will be supplemented by literary explications of key Christian themes, with an eye towards helping students appreciate and apply these themes in their own lives.

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## **T.E.A.M. – TECHNOLOGY, ENHANCED ART AND MUSIC**

**Microsoft Essentials:** This course is designed for students to utilize the Microsoft Programs: Word, PowerPoint, Outlook, Publisher, Excel, and OneNote. The students will utilize the technology skills to conduct research and complete core curriculum projects.

### **Enhanced Art and Music:**

**Intro to Studio Art** – This course is an entry level studio art course designed to expose students to basic skills and concepts in drawing, painting, printmaking, textiles, and ceramics. Students will create original pieces of artwork, using a variety of mediums. This is a one semester course for the novice artist.

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**Advisory:** Students will develop their social, personal, and academic skills through advising and class activities. Students will use this class as a space to practice these skills and identify their strengths and weaknesses. This course is an aid to students in their development while in a fast-paced environment.