#### 8<sup>th</sup> Grade Course Descriptions 2023/2024 School Year

#### Required Courses

#### 8th 814 Language Arts (Full Year Course)

In this course students are exposed to multiple genres of reading and writing. Learners will continue to develop speaking and listening skills through various mediums. Class instruction and assignments are aligned to the English Language Arts Common Core Curriculum.

#### 8th 823 8th Grade Mathematics (Full Year Course/A Scientific Calculator is Required)

This course provides a solid foundation in order to fully prepare students for Algebra I. The course builds upon the work done with solving two-step linear equations to solve a variety of linear equations and find the volume of solids. Students will also extend their experience displaying and analyzing data. Other topics that will be covered are linear functions, real numbers, Pythagorean Theorem, an introduction to the laws of exponents, and working with scientific notation.

### 8th 7922 Algebra I (Full Year Course/Must have completed 8<sup>th</sup> Grade Math. This class earns 1 high school math credit towards high school GPA)

Algebra I builds upon a number of key algebraic topics assumed to have been developed in the middle grades, namely a deep knowledge of linear patterns of change and familiarity with nonlinear patterns, such as exponential and quadratic patterns. Algebra will also build on the increasingly generalized approach to the study and representations of functions. This is done by broadening the study of linear relationships to include piecewise functions, systems of equations, and formalized function notation. Students will also develop their knowledge of powers and polynomial patterns of change and the applications of these models. Finally, Algebra I will also expand the students' knowledge of the real number system and the number domain from real to complex numbers.

#### 8th 812 Social Studies (Full Year Course)

The 8<sup>th</sup> grade social studies program examines U.S. history from the Revolutionary War to Reconstruction (1760-1865). Current events are a daily part of the curriculum. This provides a great understanding of the workings of our government and the importance of being aware of world events. Students will be asked to be involved in class discussions and to form opinions about local, national, and world topics.

#### 8th 8126 Humanities (Full Year Course 2 Hour Block)

The goal of the Humanities course is to meet all required Essential Standards in both 8 Social Studies and 8 ELA within a shared classroom in a 2-hour block of time. One SS teacher and one ELA teacher will, together, design units of instruction within an Inquiry or Project-Based learning model. The purpose is to make student learning more meaningful by showing the inherent connections between content areas and to support student choice and performance assessment through PBL.

#### 8th 832 Science (Full Year Course)

8th grade students will be experiencing a combination of basic physics and chemistry. We will explore the matter and energy around us and discover what makes everything up and what makes everything happen. Students will engage in the study of measurement, atoms, the periodic table, chemical reactions, forces, motion, energy, and waves. Students' critical thinking and problem-solving skills will be stretched and expanded as we think, talk, and ask questions like scientists. Work in this class will interact strongly with the math concepts taught in 8<sup>th</sup> grade.

HS Biology (HS 9th Grade level class): (Full Year Course/Must have completed 7th grade Accelerated Science. This class earns 1 high school science credit towards high school GPA). HS REQUIRED Biology is a science in which all living things and their processes are investigated. Biological concepts are taught to aid the student in understanding and appreciating the diversity of his/her biotic and abiotic environment. An emphasis is placed on cellular activities, genetics, and critical thinking. Laboratory experiments, demonstrations, films, and projects all help to achieve this goal. This class will cover all of the essential and core standards for biology and is aligned with the Michigan Merit Exam.

#### 8th 834 STEM Academy for 8th Science

Knight's STEM Academy is an interdisciplinary approach to learning. This approach combines topics from science, technology, engineering and math in a 2-hour block through project based learning opportunities partnering with area businesses. The STEM Academy is built around the 8th grade science curriculum. STEM education helps promote student engagement, retention of content, higher test scores, problem solving skills and teamwork. An application is required for entry. Applications are available at the Middle School in Student Services. There will be a cap size of 50 students.

#### 8th 7801 Physical Education (Required Trimester Course)

This class will emphasize personal conditioning to encourage lifelong fitness. Various exercise activities will be incorporated. An introduction to basic muscle anatomy and function, as well as exercise terminology will be supplemented with monthly fitness assessments and team/individual sports Including tennis, basketball, eclipse ball, and more.

#### 8th 7807 Health (Required Trimester Course)

8th grade health students will build upon skills learned in grades one through seven using the Michigan Model for Comprehensive Health Education. Specific areas to be covered include the following units: Reaching Out to Others (physical, intellectual, emotional and social development and neglect, first aid, listening skills, enabling behaviors and caring intervention), Watching Out for Me (Health threats of tobacco, alcohol, marijuana, cocaine, crack and steroids, choosing healthy environments, personal hygiene and grooming and nutrition education). HIV, AIDS and STDs, and Reproductive Health (focusing on maturation, genetic process, male and female reproductive systems, puberty, reproduction, pregnancy and prenatal development, birth and sexual harassment issues).

#### **Elective Courses**

#### 6th/7th/8th 7681 Intro to Spanish A (Trimester Course/NON HS CREDIT CLASS)

This twelve week class is designed to give students in 6th, 7th, or 8th grade a solid working vocabulary. The primary goal is to develop the skill of understanding spoken Spanish while exposing students to the most commonly used words. The secondary goal is to gain skill in reading comprehension. Sharp listening skills and an attitude to try something new are beneficial in this course. There is weekly homework and some individual projects may be assigned as well. While some of the basics like colors, numbers, and alphabet will be covered, the majority of the class consists of immersion through storytelling. This introductory course should provide students an opportunity to discover the language and determine any future interest in a foreign language. **This course is required before taking Intro to Spanish B.** 

#### 6th/7th/8th 7584 Intro to Spanish B (Trimester Course/NON HS CREDIT CLASS)

This twelve week class is designed to continue the development of a working vocabulary for students in 6th, 7th, or 8th grade. The primary goal is still to develop the skill of understanding spoken Spanish while exposing students to more of the most commonly used words. The secondary goal is to build more skill in reading comprehension. Sharp listening skills and an attitude to try something new are beneficial in this course. In this course, the focus will continue with listening and reading but also include more writing and speaking as students' skills emerge. There is weekly homework and some individual projects may be assigned as well. The majority of the class consists of immersion through storytelling. This introductory course should provide students another opportunity to discover the language and determine any future interest in a foreign language. **This course is highly recommended before taking Spanish 1.** 

# 8th 7680 Spanish I (Full Year Course/This class earns 1 high school credit towards high school GPA)

Spanish I is an introduction to a new and fascinating world. Students will continue to develop skills in listening, speaking, reading, and writing Spanish. Emphasis will be placed on oral communication as students are expected to participate daily in the target language. The study of Spanish culture and its influence on our way of life will also be stressed. It is highly recommended that students pass Intro to Spanish before signing up for Spanish I.

#### 7th/8th 7717 Journalism Basics (Trimester Course)

Journalism Basics will introduce concepts of expository writing for the purpose of reporting ideas and events of the world around you. In this course, you will learn the basics of journalistic research, interviewing processes, and the importance of ethically delivering information to the public.

#### 6th/7th/8th 7672 Beginning Orchestra (Full Year Course)

This class is open to any student who would like to learn the violin, viola, cello, or bass. Students can advance from this class into the Intermediate or Advanced orchestra, as their performance progresses. This class will center around basic posture, note and rhythm reading, and learning to perform with a piano, and later with a conductor. Students will learn how to tune their own instruments, and perform alone and with others. Students are expected to take this class as a year-long course, unless they progress to the intermediate group before then. Rental instruments are affordable, and students with financial hardships have the opportunity to borrow from the school upon request.

#### 7th/8th 7653 Intermediate Orchestra (Full Year Course)

Students in the Intermediate Orchestra have met the beginning orchestra requirements, and understand the standards described in the beginning class. Students will learn more complex notes and rhythmic figures, increase their note reading abilities, and shift into higher positions. Students will work through a theory curriculum, learning more about the way music is organized, and perform several times a year, alone and with others. Students will learn how to master a piece of music at their own pace, and learn skills and resources to help them succeed. This is a year-long course, and students are expected to fulfill that obligation, unless they advance to the next level before the end of the year. This class is recommended for second year orchestra students.

#### 8th 7673 Advanced Orchestra (Full Year Course)

Students in the Advanced Orchestra have met the Intermediate Orchestra requirements and standards necessary to enroll in this course. Students in the intermediate group can prove their skills and request this course, but need approval from the director in order to be placed as an advanced student. Many students in their third year will be in this group, based on their performance in the intermediate group. Students will learn advancing techniques necessary to be successful at the high school level next year, and also work on leadership skills to prepare them for that role. This class is recommended for third year orchestra students.

#### 6th/7th/8th 7651 Intro to Theater (Trimester Course)

This class will begin with the study of theater from historical perspective, including theatrical terminology and the study of classic plays. Students will participate in daily skits, perform various plays, write a play of their own and gain exposure to various theatrical styles. During the course of the trimester the students will also produce several productions and perform them for an audience. Students will be involved in all aspects of productions, with responsibilities ranging from set design, props and costumes, backstage work, and acting.

#### 6th/7th/8th 7658 Intermediate Theater (Trimester Course)

This class will continue with the study of theater from historical perspective, including theatrical terminology and the study of classic plays. Students will participate in daily skits, perform various plays, write a play of their own and gain exposure to various theatrical styles. During the course of the trimester the students will also produce several productions and perform them for an audience. Students will be involved in all aspects of productions, with responsibilities ranging from set design, props and costumes, backstage work, and acting. In addition to these performances, Intermediate Theater students will have the opportunity to study Shakespeare. They will study a wide variety of his works and come to a more complete understanding of the world's most famous playwright. Drama students will also have the opportunity to attend "Being There" field trips and experiences such as plays and musicals.

#### 6th/7th/8th 7655 Advanced Theater (Trimester Course)

This class will continue with the study of theater from historical perspective, including theatrical terminology and the study of classic plays. Students will participate in daily skits, perform various plays, write a play of their own and gain exposure to various theatrical styles. During the course of the trimester the students will also produce several productions and perform them for an audience. Students will be involved in all aspects of productions, with responsibilities ranging from set design, props and costumes, backstage work, and acting. The Advanced Theater class will focus on putting together a larger production that will involve all students in a final public performance. Advanced Theater students will also have the opportunity to attend "Being There" field trips and experiences such as plays and musicals.

#### 6th/7th/8th: 7636 STEM 1 (Trimester Course)

All you builders and makers out there, this class is for you! This class focuses on STEM projects involving robotic build and control, simple machine projects, robotic programming, and structural design. Students will have the opportunity to work with a variety of maker tools, as well as using 3D design software for the possibility to work with a 3D printer. Get ready to innovate, create, and compete in a teamwork environment.

#### 6th/7th/8th 7637 STEM 2 (Trimester Course)

This class will build upon the concepts introduced in STEM 1 and introduce new concepts that prepare students for STEM/Applied Technology classes in the future. STEM 2 features a hands-on learning environment which will feature curriculum that looks deeper into 3D printing, wind power, electric circuits, and structure design! Students will build on their communication skills and develop a mindset of flexibility, perseverance, and innovation in a competitive team environment. Get ready to get working with your hands and building your ideas!

#### 6th/7th/8th 7638 STEM 3 (Trimester Course)

This class is an extension of the STEM 2 class. It features more project-based, hands on learning opportunities with units involving flying drones, solar energy, water rockets, and gliders! Students will build on their communication and collaboration skills, as well as continuing to develop a mindset of flexibility, perseverance, and innovation in a competitive team environment. Keep your eyes up and get ready to fly your creations in the STEM 3 class!

#### 7th/8th 7704 Art I (Trimester Course)

This class is designed to reintroduce, reinforce, and implement the seven fundamental elements of Art and Design. Space, Shape, Form, Texture, Value, Line, and Color are all crucial aspects of drawing and painting. Students will learn and practice the fundamentals of drawing and painting. Students will be encouraged to take creative liberties while at the same time focusing on the fundamental aspects of drawing and painting. 6th Grade Art is not considered Art I.

#### 7th/8th 7706 Art 2 (Trimester Course/Must have taken and passed Art I as a Prerequisite)

This class is designed to review the seven elements of Art and Design with a further emphasis on the seven principles of Art and Design. The students will learn how Contrast, Balance, Rhythm, Emphasis, Movement, Pattern, and Unity are the seven principles that make a successful composition. Not only will students work with 2-dimensional media, they will also begin some introductory exercises in 3-dimensional media such as ceramics, papier mache, and paper sculpture. Students will be encouraged to cross creative boundaries in an exploration of their imaginations and talents.

#### 7th/8th 7604 Digi-Painting Class I (Trimester Course)

Do you like computers? Do you like to draw and paint? Do you not like the mess and clean up that comes with an art class? Are you creative but a little intimidated by traditional art class? If you answered "yes" to any of these questions, then the Digi-Painting class is for you! Students will be learning how to use graphics tablets and the Corel Painter® software to create wonderful drawings and realistic paint effects from scratch and photos. Painter® is the same software used by cartoon illustrators, in movies for backdrop scenery, pre-visualization artists, and other creative professionals.

#### 7th/8th 7605 Digi-Painting II (Trimester Course)

Students that previously took Dig I-Painting I are now invited to continue enhancing their digital art skills with Digi-Painting II. This course will offer you an opportunity to mentor other Digi-Painting I students, as well as explore the use of digital art as a medium for communicating. A theme of study will be chosen and a portfolio you create will be presented at semester's end. If you enjoy art, technology, working with others, and desire to build on the skills learned in Digi-Painting I then you should enjoy this class. Admission to this course will be based on a grade of a "B+ or higher" in Digi Painting I and has shown leadership qualities to mentor other students.

#### 6th/7th/8th 7644 Beginning Band (Full Year Course)

Students in the beginning band will enter the process of learning to play a band instrument (woodwind, brass, or percussion). Students will learn about the construction of written music and how it applies to the physical aspect of playing an instrument. As part of the curriculum, the band will present multiple performances throughout the school year. This class is a year-long course and students are expected to continue through the entire school year.

#### 6th/7th/8th 7645 Intermediate Band (Full Year Course)

Intermediate band will continue to build upon the skills which were learned at the beginning level, as well as offer additional opportunities to perform. As part of the required curriculum, both the band and orchestra will present fall, winter, and spring performances, as well as possible participation in the Michigan School Band and Orchestra Association District Festival (MSBOA). For those individuals who are interested in solo or small group performing, there is also the MSBOA solo and ensemble festival. Band members will be exposed to marching band through performances with the high school band at a high school football game and through participation in Memorial Day parades in Marne and Standale. This class is recommended for second year band students

#### 8th 7646 Advanced Band (Full Year Course)

Advanced band will continue to build upon the skills which were learned the previous year as well as offer additional opportunities to perform. As part of the required curriculum, the band will present fall, winter, and spring performances as well as possible participation in the Michigan School Band and Orchestra Association District Festival. For those individuals who are interested in solo or small group performing, there is also the MSBOA solo and ensemble festival. Band members will be exposed to marching band through performances with the high school band at a high school football game and by participating in Memorial Day parades in Marne and Standale. Students desiring both choir and instrumental music will need to contact Student Services. This class is recommended for third year band students.

#### 7th/8th 7641 Choir (Full Year Course)

The Choir experience builds the vocal skills of the middle school students, as well as offers opportunities in performance. As a part of the required curriculum, the choir will present fall, winter, and spring concerts. The choir participates in community service projects, assemblies, and performs in the annual Showcase of Arts. Various solo opportunities are available throughout the year.

6th/7th/8th 0001 Computer Programming 1, Digital Game Design (Trimester Course)
Have you ever thought about going beyond just playing video games and designing your own game? Then this class is for you! Students will be learning the basics of software application design and development through game design! Class instruction will be centered around STEM concepts as they relate to computer program design. Programming concepts will include software design apps like Gamestar Mechanic, as well as learning block coding through the Scratch programming language. By the end of the course, students will have a better understanding of digital programming, an essential skill in many 21st century careers.

# 7th/8th 0002 Computer Programming 2, Block Programming (Trimester Course) <u>Must have successfully completed the Computer Science 1 Course, Intro. To Computer Programming.</u>

Students will build on their experience in the Computer Science 1 class and work to design their own game using the Scratch block programming language. Students will be challenged to build a deeper understanding of programming and game design. Additionally, students will take their experience in block coding and put it to use working with Microbits, using their programming skills in a real world application.

# 7th/8th 0003 Computer Programming 3, Applied Programming (Trimester Course) Must have successfully completed the Computer Science 1 & 2 Courses.

Students will continue their journey into computer programming that began in Computer Science 1 & 2 by using their block coding skills and also venture into text based programming languages like Javascript and Python. Students will apply their understanding of programming through interactive projects developing apps for computer tablets in problem solving projects.

#### 8th Tech 7688 (Trimester Course)

Do you want to know more about how to use technology to learn more about the things you are interested in? This course is designed to continue on with important concepts in the use of technology as a life-long learning tool. Some topics will be extended from the 7th Grade Technology course, including a deeper look into Career Exploration and Personal Finance. Other topics will be new, such as using technology to create, edit, and share media content like video, audio, and image files. Students will work on skills to be objective on information they see in the news, on social media, and other platforms of the Internet.

#### 6th/7th/8th 7657 Teen Leadership (Trimester Course)

This class will be offered to 6th, 7th and 8th graders. Teen Leadership prepares students for success in all they pursue, in and beyond school. The course follows an illustrated Student Manual and Comprehensive Course Guide that includes activities, handouts and daily lessons. Students will learn more about who they are, how they can support others and build a safe and responsible community. The practical skills taught in this class will help our students become leaders in the building and in life.

#### 7th/8th 7510 Web Design 1:HTML Basics (Trimester Course)

In this course, you will learn the basics of HTML5, which is the foundation language of web design and web development. This is the first step in learning how to code web apps. By the end of the course, you will be able to build simple websites, but more importantly, you will understand many key concepts that will propel you towards becoming an app developer.

#### 7th/8th 7511 Web Design 1:CSS3 Basics \*\*(Trimester Course)

CSS is short for Cascading Style Sheets, and it is the computer language that allows you to add color, design and layout to your websites. It is the styling language of web design and web development. Having a basic understanding of CSS is fundamental for any web developer. **Prerequisite**: You should have completed the Web Design 1: HTML5 Basics course.

#### 6th/7th/8th 7610 Environmental Studies Lab (ES-Lab) (Trimester Course)

In this class, students explore the various roles of environmental engineers, including: environmental cleanup, water quality, groundwater resources, surface water and groundwater flow, water contamination, waste disposal and air pollution through research as well as hands-on labs. There is an outdoor element to the class where we head outside to identify plants, forage, test water quality as well as maintain the Knight Hike.

#### 6th/7th/8th 7601 Yoga (Trimester Course)

Whether you would describe your body as bendy or you feel stiff as a board, yoga will help relax your muscles and revitalize your spirit. In this class, students will be guided through the basics of yoga. They will learn both basic and advanced poses based on their individual needs and abilities. Students will also be taught proper alignment of those poses. Students will learn the benefits of yoga both on and off the mat in spirit and mind. This class is good for non-athletes and athletes, no matter what your flexibility is. Studies show that yoga has been proven to reduce and eliminate stress and improve concentration.

#### 6th/7th/8th 0007 Creative Collaboration- (Trimester Course)

This class is heavily focused on teamwork, outside the box thinking and the ability to problem solve. Students will be placed in a team and presented with a "problem" which they must solve in a positive and creative way. Each team must create every part of its "solution" by writing a unique script, building sets, creating props, and designing costumes all while working together.

#### 6th/7th/8th 0006 Cultural Studies (Trimester Course)

Students will spend time learning about cultures of our world both through research, projects as well as a portion with our Virtual Reality viewers and the Google Arts and Culture App. Our Google Virtual Reality student devices will help us take a closer look at what makes us human: our capacity for creativity and the way we live together. Explore digital artworks, experience festivals and events around the world, if you are interested in learning about places other than where we live this is the right class for you.

#### 6th/7th/8th 0004 Life Skills (Trimester Course)

Have you ever thought about learning some basic life skills such as cooking, basic sewing, practicing mindfulness and meditation, budgeting, and organizing? In this new Healthy Living class, we will take a look at and practice making choices that will help set you on your way to enjoying an all-around healthier lifestyle. Some of the units we will experience will be Food and Nutrition, Budgeting and Economics, Health and Hygiene, Mending, Mindfulness, and Organization. If any of these units sound interesting to you, then don't miss signing up for this trimester course. We wouldn't want to have it without you!

#### 6th/7th/8th 0008 Peer to Peer (Trimester Course)

The Peer to Peer Support Student is assigned to the program daily during their scheduled class period and follows the same schedule for one trimester. The primary responsibility of a Peer to Peer Support Student is to model age appropriate behavior for the student with the I.E.P. The Peer to Peer Support Student may provide peer support to his/her assigned student in the areas of organization, social skills, and academics during the scheduled class period. The Peer student is expected to participate in training, follow school and classroom expectations, journal, complete a trimester-end project, and participate in case-conferences throughout the trimester.

#### 6th/7th/8th 7640 History of Rock N Roll- Part 1(Trimester Course)

Let's Learn about ELVIS! This class will guide you through time to the "King of Rock N Roll", and see why he earned the famous title. Music is very powerful, and ALL of the music we listen to stems from this time in history. Students do not need any prior musical experience to enjoy this course. Take "From Rock N Roll to Rock" to expand to the next era of listening!

#### 6th/7th/8th 7647 From Rock N Roll to Rock- Part 2 (Trimester Course)

Music of the 1960's

Bring on the Bands! Girl and boy bands became the center of all music during the 1960's, as the era of Elvis came to an end. Join us to listen daily to music from the Beatles, The Rolling Stones, and explore the beginning of the Jackson 5! Students do not need any prior musical experience to enjoy this course. It is highly suggested to take the History of Rock N Roll, Part 1 first, and then "The Heart of Rock" after to create a full year of Rock N Roll excitement!

## 6th/7th/8th 0005 The Heart of Rock, Music of the 1970's and 1980's- Part 3 (Trimester Course)

Take a leap into disco with groups like the Bee Gee's and ABBA, and heavy metal with groups like Queen and Led Zeppelin, among others. Explore the heart of King of Pop, Michael Jackson, as we dive into the music of the 70's and 80's. Students do not need any prior musical experience to enjoy this course. It is suggested to take the History of Rock N Roll, and "The Heart of Rock" to help understand where these groups got their influences from.

#### 7th/8th 7643 Intro to Jazz/Blues Performance (Trimester Course)

In this course, Instrumental Music students can learn the fundamental basics of Jazz and Blues performance, learn music in this genre, and perform for the community. Prior experience of at least one year of instruction in a performance group required. Come join Band and Orchestra students and play music that is at the root of American Music.

#### 7th/8th 7602 Knight Sports (Trimester Course)

This activity class centers on learning and playing team and individual sports, both traditional (basketball, badminton, volleyball, etc.) and non-traditional (eclipse ball, mat ball, team handball, etc.). Focus will be on healthy competition in small-sided games/tournaments, and on learning to exemplify Knight Pride through sportsmanship and fair play. Classes may be multi-grade or separate for each grade based on enrollment.

#### 7th/8th 7603 Fitness FUNdamentals (Trimester Course)

This activity class will focus on learning foundational principles of fitness, using a variety of fitness equipment safely and properly (physioballs, battle ropes, TRX suspension trainers, agility ladders, mini hurdles, etc.), and developing a personal fitness plan for daily use. Students will set personal goals and workout daily to achieve them.