7th GRADE ELECTIVES

<u>APP CREATORS</u> (PLTW): (*Prerequisite: Design & Modeling*) Students will be exposed to computer science as a means of computationally analyzing and developing solutions to authentic problems through mobile app development and will convey the positive impact of the application of computer science to other disciplines and to society.

ARCHITECTURE & CONSTRUCTION (PLTW): (Prerequisite: Design & Modeling)

Today's students have grown up in an age of "green" choices. In this unit, students learn how to apply this concept to the fields of architecture and construction by exploring dimensioning, measuring, and architectural sustainability as they design affordable housing units using Autodesk's® 3D architectural design software.

<u>ART 2D</u>: This course is for students who seek experience in drawing, painting, and printmaking. They will learn to draw from observation and explore big ideas such as identity, mood, and art for social change. Students will also study the lives and works of selected two-dimensional artists. The course combines art production with extended experiences in art history, criticism, and aesthetics. (Students may take Art 2D a second time & can expect a similar, but more challenging experience.)

<u>ART 3D</u>: Students in this course will seek experiences in both additive and subtractive sculpture by using a variety of materials such as clay, fibers, plaster, wood, and art metals. The study of selected artists noted for their 3-dimensional works will be included. The course combines art production with extended experiences in art history, criticism, and aesthetics. (Students have the option of taking Art 3D for a second time and can expect a similar, but more challenging experience.)

AUTOMATION & ROBOTICS (PLTW): (Prerequisite: Design & Modeling) Students are given the opportunity to combine mechanisms with input & output devices to automate the mechanisms. Construction, programming skills, & projects provide students the opportunity to connect their learning throughout the lessons in the unit. Students take on the role of interns, work in teams to create prototypes to meet the needs of clients. They also explore different aspects of automation & robotics, & experience how solving real-life problems involves teamwork of mechanical engineers, software developers, & electrical engineers.

DESIGN & MODELING (PLTW): Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

<u>DRAMA 7/8</u>: This course is designed to take a deeper look into acting and stage production. Numerous assignments and activities will help students develop the skills used in theatre arts. Most importantly, it provides students the necessary public speaking skills needed in all careers today. Students will take part in the following activities: autobiographical speech, dramatic reading using different accents, self-written monologues, pantomimes, charades, skits and one-act plays.

<u>HANDS-ON ENERGY</u> **7/8 (PLTW):** Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

<u>JOURNALISM 7/8:</u> Students participate in all steps involved in publishing a school newspaper. Students learn the basic elements of newspaper writing, layout, design, copywriting, editing and photography.

<u>LIFE SKILLS 7/8</u>: Students will gain necessary skills for successful self-care in the kitchen. Units to be explored will include kitchen safety, kitchen equipment, kitchen equivalents and measuring, table setting and manners, kitchen terminology and nutrition.

<u>MATH FOUNDATIONS 7:</u> This course is for students who are performing below grade level. It is a course that is research-based, middle grade mathematics curriculum that actively engages students in solving real-world math problems using representational models, multiple strategies, and an approach that produces results. All topics are at grade level. Student placement is based on teacher recommendation.

MEDICAL DETECTIVES 7/8 (PLTW): Students play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a "crime scene." They solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.

<u>PHYSICAL EDUCATION 7/8</u>: This class is designed to increase the student's fitness level and make them active in life- long activities. The class will encourage the student to learn rules and skills necessary to participate in these activities: Archery, Bowling, Golf, Tennis, Fitness Training, Cardio Training, Volleyball, Badminton and Softball.

SWIMMING 7/8: Only offered at Anchor Bay Middle School North

Students will receive instruction in the basic strokes of swimming and aquatic skills necessary in and around the water. The goal is to increase each student's ability to swim with confidence. Lack of participation in daily water activities will result in a lower grade.