Date	Received:	
------	-----------	--

2020 - 2021 GRADE 8 UMS ELECTIVE COURSE SELECTION FORM

Please clearly **print** the following information in **pen**:

/ F	<i>b</i>		
Student Name:			
Address:			
Email:			
FIf you are new to Montgomery Upper Middle School please select a World Language. Otherwise, students will follow the progression from 7^{th} grade. Please indicate 1^{st} , 2^{nd} , and 3^{rd} preferences.			
() FRENCH () GERM	MAN () SPANISH		
semester electives below. We will do our best	full year courses), also choose three additional to schedule two of your semester elective choices of music course in previous school or audition with the director.		
87000 () Band The instrument I play is: _			
87020 () Orchestra The instrument I play is: _			
87010 () Chorus			
AND/OR			
<u>Please select 5 courses</u> – It is our goal to provi guaranteed.	ide you with your selections, <u>but this cannot be</u>		
Blended Electives:	8th Grade ONLY Electives:		
77400 () Young Entrepreneurs	89600 () Intro to Studio Art (S1 only)		
89200 () Inventions & Innovations/Set Design	89650 () Studio Art (S2 only)		
89910 () Digital Music	87301 () Sculpture & Ceramics		
77700 () Introduction to Engineering & Design	87600 () Digital Journalism		
89500 () Global Leadership	89400 () Film Production		
87500 () Theater Arts	89700 () Drawing & Computer Graphics		
87000 () Everything Robotics	89750 () Printmaking		
79200 () Intro to Coding & Web Design (Sl only)			
89300 () Coding & Web Design 2 (S2 only)			
Student Signature:	Parent Signature:		

GRADE 8 - ELECTIVE COURSE DESCRIPTIONS

YOUNG ENTREPRENEURS: Are you interested in fashion, sports, photography, cooking or technology? You can learn how to be an entrepreneur with your interests in mind and get your idea off the ground. You will use and improve your creativity and problem-solving skills while learning new computer skills. During the course, you will experience starting up a business and learning different strategies through current businesses, online videos and software. Business foundations, communication skills, financial literacy and computer skills will be explored.

DIGITAL MUSIC

The world of music has met the digital age! Students in this course will work with iPads and digital instruments both to compose and perform music. Students will be working primarily with the iPad applications Garageband and Symphony Pro to interactively learn about music notation, chord structure, and music composition. The opportunities to compose both classical and popular music exist. Objectives of the course include learning to read music and learning about different musical genres, music theory and most importantly, using that knowledge to compose original music using the iPads and digital instruments.

INTRODUCTION TO ENGINEERING & DESIGN [STEM]: This course will focus on giving students the opportunity to create, construct, and evaluate their own design work while managing time, materials, tools and processes. Students will apply mathematics and science principles in the construction of a Balsa wood bridge that is constructed to be the most efficient design. To study mechanisms, students will explore the use of simple machines be constructing a mousetrap powered vehicle that is designed to travel to a predetermined distance. The creative design process will be used in all activities so students will develop better problem-solving and critical-thinking skills.

INVENTIONS & INNOVATIONS/SET DESIGN [STEAM]

This elective is designed to increase problem solving and design skills. Inventions & Innovations/Set Design is an elective, which revolves around design, hand drawing, modeling and prototyping of inventions and innovations. This course will provide the opportunity for students to study technology as the creative design process in areas of transportation, energy systems, manufacturing, and construction. Students will work collaboratively with the Fine Arts students on many projects including the designing and fabrication of the set for the spring production.

INTRODUCTION TO CODING & WEB DESIGN (Offered in Fall only)

Web Design and Coding 1 is an exploratory elective fall course offered to all 7th and 8th graders. This course will teach the mechanics and elements of both web design and coding basics. With every aspect of modern life linking back to the internet, students will learn to create high quality websites that have compelling information and aesthetically pleasing formats. Students will build a foundation in computational thinking by learning basic coding concepts to create coding games, animation and artwork. Also, students will be introduced to current computer programming languages and have the opportunity to program physical objects too.

CODING AND WEB DESIGN 2 [STEM] (Offered in Spring only)

There is no Prerequisite for this class.

Web Design & Coding 2 requires no prerequisite. This is a spring elective course for all 7th and 8th graders. This elective course teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. This is a project-based course that teaches students how to use block coding and then graduate to javascript. Students will then build their own web pages while learning HTML5 and CSS, and will create their own live web pages to serve as portfolios. Students will uncover coding mysteries behind the Internet and will be able to explain how web pages are developed, analyze and debug existing websites, and code their own multi page websites.

THEATER ARTS:

Theater Arts is designed to give students an understanding and appreciation for the performing arts. Students are involved in activities that develop acting skills, theatre performance, and communication, concentration, and body movement skills for actors. Students are invited to attend a trip to see a professional show. This class is designed to let students have fun while learning about drama, acting, and the theatre. The course concludes with a performance, by the class, of a short play.

EVERYTHING ROBOTICS [STEM]

Everything Robotics is where students transform from being consumers of technology to creators of technology. This is a hands-on course that teaches science, technology, engineering and mathematical concepts in a fun and engaging way. Students learn the valuable skills of time management, problem solving and teamwork as they complete robot challenges. The engineering design process is applied as students investigate real-world problems, come up with solutions and debug programs as they test and evaluate their models. Research and current events in the areas of careers in robotics and other STEM disciplines are also integrated throughout the course.

GLOBAL LEADERSHIP

In this project-based learning course, students work in collaborative teams in an attempt to find solutions to real-world domestic and global issues. Students investigate the UN Global Goals for Sustainable Development to deepen their understanding of these issues. Some of the global goals students will explore may include, but are not limited to, no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, climate action, and clean energy and environmental sustainability. Students will conduct their investigations using a variety of multimedia and authentic experiences. The Design Thinking Process will be utilized by the students to create viable and innovative solutions. Teams will be evaluated on their use of each step in the Design Thinking Process. The course promotes a variety of 21st Century competencies, including global awareness; active and responsible citizenship; self-directed learning; innovative and practical problem solving; collaborative team membership; effective communication; and information-literacy research.

INTRODUCTION TO STUDIO ART: This course will encourage students to develop creative thinking, decision making, and problem solving skills through the use of the Elements of Art and Principles of Design. The areas of study will include drawing, painting, printmaking, and sculpture, with a focus on creative expression and personal discovery. This course qualifies students to apply for a waiver into studio I at MHS.

STUDIO ART: Though the primary focus of this course is 2-Dimensional Visual Design, students will develop their artistic skills and creative expression through a variety of mediums including observational drawing, watercolor and acrylic painting, mixed media collage, and sculpture. This course qualifies students to apply for a waiver into studio I at MHS.

SCULPTURE & CERAMICS: In this course students will enhance their understanding of the Elements of Art and Principles of design, by applying their artistic skills and creative vision to 3D forms of artwork. Students will solve visual design challenges through planning and sketching in the production of 3D works of art. Areas of study will include collage, wire sculpture, mixed media projects, and ceramics.

DIGITAL JOURNALISM: In this course, students will study the power of journalism and media to become digital reporters. Students will study the structure of news reporting, learn how to conduct interviews, shoot B-roll, and gather and present information on a variety of topics. Projects will include biopics, interviews, news packages, PSAs, and documentaries. Additionally, students will learn to distinguish fact-based reporting from "fake news," and examine the ethical standards and civic importance of journalism.

FILM PRODUCTION: Students today are constantly bombarded with visual messages. In this course students will evolve from passive recipients of visual stories to proactive consumers who learn to create and analyze narrative media. Students will learn to use the tools of visual storytelling including framing and composition, voiceover, sound effects, music, and editing. Projects and skills will include short films, genre narratives, radio plays, commercials, stop motion, screenwriting, music videos, and editing for continuity.

DRAWING & COMPUTER GRAPHICS: This course will allow students to focus on developing and enhancing their observational and technical drawing skills, while also working with computers, technology, and graphics imaging software to complete a variety of visual design tasks. Throughout the course students will explore drawing, illustration, graphics imaging and design.

PRINTMAKING: The art of printmaking can be traced back to 3000 BCE. Then and now, printmaking is used to create art and to communicate a message. Students will have the opportunity to create multiple original works of art using a variety of printmaking techniques. This course will consist of, but not be limited to, techniques such as stenciling, mono printing, etching, cardboard transfers, frottage, sunprints, collographs, and block printing. We will also explore the art of papermaking. In addition to learning the art of printmaking, students will practice collaboration with classmates, project management, and art studio procedures. This course will run as an 8th grade, semester long elective.