

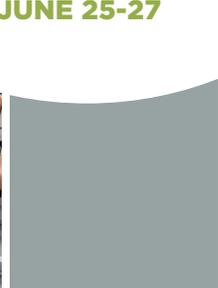
SCHEDULE OF CLASSES AND EVENING ACTIVITIES FOR 2019



2019
**GRANDPARENTS
UNIVERSITY**

Uniting Spartan Generations

JUNE 25-27



Make lasting memories and bridge the generation gap by enjoying three days and two nights on the beautiful Michigan State University campus while learning side by side with your grandchild(ren) during the 14th anniversary of Grandparents University at MSU.

Registration will open on **Wednesday, March 6 at 10 a.m. ET**. Prior to registering, please review all details on the registration page at alumni.msu.edu/grandparents.

Some classes will offer multiple sessions throughout the three-day event. While every effort is made to ensure no changes happen, unforeseen circumstances may lead to a class cancellation or rescheduling. If this happens to a class you are registered for, you will be asked to pick a new class or assigned to one with open seats.

SESSION 1: TUESDAY, JUNE 25

100 A Smashing Time with Nuclei

24 Participants

See MSU's National Superconducting Cyclotron Laboratory, a world-leading nuclear research facility. Get hands-on with a model "nucleus" to learn how and why we smash nuclei at half the speed of light, then tour the lab and learn all about the Facility for Rare Isotope Beams!

101 Air Gun

32 Participants

In this course participants will have hands-on experience shooting an Olympic-style air rifle and air pistol. The session includes a safety briefing and an introductory to shooting fundamentals.

102 Archery

22 Participants

Class will begin with a quick safety briefing and each person will be fitted with the proper safety gear and archery equipment. The MSU Archery Team will be instructing on the proper form for archery.

104 Biology of the Spotted Hyena

30 Participants

Join us in learning about the fascinating spotted hyena, studied by Dr. Kay Holekamp's laboratory for 30+ years. See and touch skulls, play games, and learn about what makes hyenas so unique in the animal kingdom.

105 Build a Science Center

30 Participants

Imagine a science center where you can see an exhibit, play with it, experiment with it, break it, repair it, rebuild it, improvise it, make a copy and take it home. Now, imagine that the entire science center is built by students like YOU.

106 Building Your Ideal Neighborhood

40 Participants

This activity-based session will look at how the availability of resources impact communities. In teams, participants will build their own communities using LEGOS and other materials supplied. Each team will have different materials or "resources" available to them. Following the "building" phase, communities will be compared, and an interactive discussion will take place.

107 Calming and Relaxation

25 Participants

Life gets busy and pretty hectic sometimes. Wouldn't it be nice to know some ways to keep calm and take a moment for yourself? In this class we will discuss different methods for relaxation, including breathing techniques and even some laughter, all to help you through those tough moments. We will also make relaxing calming jars that you can take with you for those times when you just need to unwind. We will then end our class with a muscle relaxation technique that will leave you feeling refreshed and renewed.

108 Crazy for Crêpes: Exploring a French Culinary Tradition

20 Participants

Crêpes are thin pancakes served as either snacks or meals, which are popular throughout the French-speaking world. In this course we will learn how to make them, enjoy the fruits of our labor, and learn a little French culture, history and language along the way. All recipes will be included so you can enjoy these delicious Gallic goodies again at home.

109 Disney Trivia

25 Participants

Fun for all ages! Jeopardy style game that is all about Disney! Work as a team to solve the answers. Participants will receive goodie bags and the winning team will earn a prize in addition to bragging rights.

110 Engineering Design with Popsicle Sticks and Tape

40 Participants

An introduction to engineering design is provided through dialogue, the concept of design goals, and hands-on activities. All participants will use their ingenuity to build a tower of popsicle sticks and tape, illustrating engineering design processes.

111 Folk Dancing Fun

50 Participants

Take a break from desks and chairs to get up and move! Learn a variety of folk dances from around the world. This class is for all ages and no experience is required!

112 For All the Marbles

12 Participants

How to color/dye fabric using the ancient technique of marbling. Learn how to marble t-shirts, fabric (for quilting and sewing), tennis shoes, etc. If it can be wet, it can be marbled.

113 Geocaching in the MSU Horticulture Gardens

25 Participants

Learn the basics of the popular worldwide hobby of geocaching while touring the beautiful MSU Horticulture Gardens. You will learn what geocaching is all about and how to operate a basic GPS unit. We will then find up to five geocaches. Basic loaner Garmin's will be provided, but if you have your own, feel free to bring it. Please note this class **REQUIRES A LOT OF WALKING** and is designed for those who have never geocached before or are new to the activity.

114 Hands-On Chemistry

84 Participants

Join us for some hands-on chemistry fun! In this course, we'll be working as real scientists to understand how the world works. Be prepared to get a little messy as we experiment with chromatography art, oobleck, chemical gardens, superabsorbent polymers, and more!

115 History of Native American Agriculture

40 Participants

What if sugar tasted like sand? What if lemon juice tasted like lemonade? Find out as we explore how taste and smell combine to produce the flavors of the foods we enjoy—with lots of hands-on investigation.

116 History of Sparty

125 Participants

You have seen him at athletic events, in parades, around campus on game day, in ESPN commercials, at weddings, birthday parties, alumni club events, and promoting literacy to children in schools. He is everywhere; he is loved; and he is an embodiment of what it means to be a Michigan State Spartan. Have you ever wondered how our beloved Sparty became the MSU icon he is today? In this session you will learn the origins of Sparty and the Sparty Mascot Program, and get a rare insider's look at what it is like to portray Sparty. There are many exciting aspects of the program that most Spartans do not have the opportunity to witness. Join us for an in depth look of Sparty, the gentle giant.

117 How do Sheep Make Wool?

25 Participants

Visit with lambs and ewes at the MSU Sheep Teaching and Research Center. Learn how we care for our sheep, how they grow wool, what they eat, and how they produce meat for us. *This is a one hour session.*

118 How to Change the World in 30 Days

30 Participants

How often have you watched the news and thought, "that shouldn't happen!" or "if I ruled the world, I would..."? This 90-minute class is your chance to identify a law or government policy that you want to change; be a key policy maker who has influence and the tools to make it happen. Participants will leave with an action plan and/or a letter to a policy maker. **You are welcome to bring a tablet or laptop to this class to help with letter writing. (Phones aren't really useful.) Those who don't bring a laptop or tablet will engage in the time-honored tradition of writing a postcard by hand.

119 Innovating, Prototyping, and Creating

30 Participants

Prototyping is a designer's practice where quick sketches, drawings, and wireframes are developed for an idea, app, or product. In this session, we'll talk about why designers prototype. We'll do some brainstorming and prototyping together to create a new, interactive app—an ice cream finder!

120 Introduction to Robotics

24 Participants

There will be a short discussion of robot applications. Grandparents and grandchildren will then finish building a LEGO Robot. The students will make the robot come alive when they learn how to program the robot to move.

121 Knockout Anatomy

50 Participants

Join us for a dynamic blend between the anatomical sciences and martial arts. Learn the anatomy behind various martial arts maneuvers and practice these techniques yourself. Knockout Anatomy will leave you with a greater appreciation of the human body and the vulnerability of its form.

122 Learn Tamil Culture

30 Participants

Tamil is one of the classical languages in the world. Its origin is unknown. This culture is rich with an abundant of art forms. This session will open the door to reveal a world totally exotic and inspiring.

123 Life Beneath the Naked Eye

15 Participants

This session will highlight the use of a scanning electron microscope, which is useful for research and education in science and engineering. We will examine insects and a variety of materials at high magnification to understand their structure and function. Children of all ages are invited to a hands-on experience using a high powered microscope.

124 Make a Basket

10 Participants

Learn about traditional basketry by making a basket. We will make a simple letter or napkin basket using under and over weaving with reed.

125 Make Your Own Book!

16 Participants

Create books the way artists do—by hand! We'll start by looking at some very unusual books in MSU's collection. Then, we'll make three different book structures and decorate them!

126 MSU Bug House

30 Participants

Come to the Bug House to see displays of insects from around the world as well as have the opportunity to see, touch and hold live insects, tarantulas and scorpions.

127 MSU Hockey

30 Participants

Through this session, participants will tour Munn Ice Arena including the Michigan State Hockey locker room and facilities.

128 North Stars and Meteors (Planetarium)

140 Participants

Listen to stories of the stars told by Native American master storytellers. In this show, participants will hear two stories. "Why the North Star Stands Still" and "Coyote and the Dancing Stars" retold by Lynn Moroney (Chickasaw).

129 Pickleball for Families

20 Participants

Participants will learn the fundamental rules and strategies for Pickleball. The book "Smart Pickleball" will be provided (one copy per family).

130 Playful Platonic Solids

30 Participants

Construct the Platonic solids with toothpicks and marshmallows and explore the faces, edges and vertices for the polyhedra. If time permits, participants may do some origami.

131 Rain Cloud Groundwater Simulator

10 Participants

The Lansing region receives its drinking water supply from groundwater (the Saginaw Aquifer). The simulator teaches the basics of groundwater recharge and groundwater flow through the aquifer.

132 So You Want to Work in the Video Game Industry

20 Participants

Participants will learn what it takes to get a job in the video game industry and how to get there. They will also work on making their own video games.

133 Spartan Nursing 101: Simulation, Stethoscopes and Syringe Water Fights!

50 Participants

Experience being a Spartan Nurse in the simulation lab and learn how to take vital signs, listen to lung sounds, and start an IV. Race against participants in a scavenger hunt of the lab, meeting some of our skills task trainers including Trach Jake, Surgical Sally, Chester Chest, and of course, our favorite patient, HAL— a simulation manikin that breathes, blinks, and even talks as you provide nursing care! Experience drawing up medication from a vial, but learn fast, or you might be the most unfortunate victim of the syringe water fight! These are just a few of the activities you may experience while working as a Spartan nurse-in-training in an environment that looks and feels like a hospital!

134 Teamwork and Timbers

30 Participants

The connections to our rural heritage are disappearing rapidly from generation to generation. Relive those connections through stories as you work together to construct a timber frame barn. No tools or previous knowledge is necessary! The Michigan Barn Preservation Network board members will take you through the steps to assemble the framework of a one quarter scale barn similar to those still seen in the rural Midwest. *This is a one hour session.*

135 The Historical Student Experience at MSU

20 Participants

Explore life at Michigan State University through historical photographs and documents. Use your history detective skills to discover what students did for fun, the rules they were expected to follow, and what it was like to live in the dormitories. Join the university archivists, who care for over 160 years of MSU history, for this walk down memory lane.

136 Theatre Games and Improvisation

40 Participants

Participants will engage in very user friendly, fun and engaging theatre games. Activities are simple, enjoyable, and guarantee laughs and a good time. It's a great way for grandparents and their grandkids to engage with one another.

137 Vermicomposting: Fun with Worms

30 Participants

Participants in this class should expect to learn the basics of composting with worms! Using red wigglers, learn how a worm can eat their weight in food waste each day. Learn how to make a habitat for worms and how to vermicompost at home to divert from the landfill and produce great organic fertilizer!

138 Watercolor Painting on Cold Press Paper

20 Participants

Learn the art of watercolor painting with easy techniques for all ages to enjoy.

139 What Is Culture and How Does It Affect Our Interactions with Others?

50 Participants

This session will introduce what culture is and how it may affect our communication with others from around the world. We will facilitate a face-to-face game/simulation with the involvement of all attendees and have a lot of fun. Students will have a chance to ask questions, participate in a cultural game and discuss their experiences.

140 Where Does Milk Come From?

25 Participants

Tour the MSU Dairy Teaching and Research Center and learn all about how dairy cows provide us with healthy dairy products. You will get to milk a cow and see inside our famous cows with a window in their stomach. MSU ice cream is provided at the end of the tour!

141 Where Does Our Food Come From? The Amazing Honey Bee!

40 Participants

A large portion of the world food supply is directly or indirectly affected by honey bee pollination. We'll learn about the honey bee, their impact on our food supply, and how we can help this amazing insect!

142 Fun Origami Lesson - The Joy of Discovering Japanese Culture Through the Art of Paper Folding

20 Participants

Origami is the art of paper folding which is associated with Japanese culture. In this workshop, we will talk about the history and do a hands-on origami lesson together.

143 Importance of Activity in Our Lives

30 Participants

Learn from an Osteopathic doctor about health and physical activity. The class will focus on why physical activity is imperative for all ages, while learning how to be active individually and with family members.

SEE PAGE 16 FOR TUESDAY EVENING ACTIVITY OPTIONS

SESSION 2: WEDNESDAY, JUNE 26

200 A Smashing Time with Nuclei

24 Participants

See MSU's National Superconducting Cyclotron Laboratory, a world-leading nuclear research facility. Get hands-on with a model "nucleus" to learn how and why we smash nuclei at half the speed of light, then tour the lab and learn all about the Facility for Rare Isotope Beams!

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22 Participants

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25 Participants

See how MSU's Landscape Services cares for the trees on campus on this walking tour. Explore some of the equipment our arborists use and see them in action.

204 Are You the Next Olympic Athlete? Measuring Movement in Health and Disease

15 Participants

The session will cover technology used to analyze human movement, and how it can be used to assess motor skill both in health and disease.

205 Build a Science Center

30 Participants

Imagine a science center where you can see an exhibit, play with it, experiment with it, break it, repair it, rebuild it, improvise it, make a copy and take it home. Now, imagine that the entire science center is built by students like YOU.

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12 Participants

Learn basic skills for decorating cakes and cookies at MSU Bakers.

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25 Participants

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208 Cash Conversations with the Credit Union

25 Participants

Do you know the similarities and differences between credit unions and banks? Have you been struggling to save money for something you really want? Join the MSU Federal Credit Union through an interactive journey to learn about financial institutions, the differences between needs and wants, the real cost of your wants and how to save money to achieve your goals.

210 Connecting Communities, Creating Stories

26 Participants

CCCS is a Community Composing Project in The Writing Center designed to help people tell their stories and listen to others in order to make connections and strengthen communities.

211 Curious Crew Investigation: Candy Chemistry

50 Participants

Making candy is a science. It involves using many chemicals. These chemicals are SAFE to eat; however, this investigation requires no taste testing at all. In this session, learn how chemists work with chemicals used as ingredients to make candy. What happens when candy chemists PUMP sugar, corn syrup, flavoring mix and lactose with pressurized carbon dioxide gas? If you're curious, join WKAR Family in discovering the answer.

212 Disney Trivia

25 Participants

Fun for all ages! Jeopardy style game that is all about Disney! Work as a team to solve the answers. Participants will receive goodie bags and the winning team will earn a prize in addition to bragging rights.

213 Engineering Design with Popsicle Sticks and Tape

40 Participants

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12 Participants

How to color/dye fabric using the ancient technique of marbling. Learn how to marble t-shirts, fabric (for quilting and sewing), tennis shoes, etc. If it can be wet, it can be marbled.

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25 Participants

Learn the basics of the popular worldwide hobby of geocaching while touring the beautiful MSU Horticulture Gardens. You will learn what geocaching is all about and how to operate a basic GPS unit. We will then find up to five geocaches. Basic loaner Garmin's will be provided, but if you have your own, feel free to bring it. Please note this class REQUIRES A LOT OF WALKING and is designed for those who have never geocached before or are new to the activity.

216 Geodes

100 Participants

Geodes: What are they? How are they formed? Where are they found? You will learn about geodes and also get to pick one to break open!

217 Got Violin?! It's a Cool Tool!

18 Participants

Ever wanted your grandchild to learn the violin? In the time of the class period you and your grandchild will learn the basics of the instrument and leave with some music to take with you!

218 How Do Pianos Work? An Introduction to Piano Technology.

18 Participants

Learn the basic principles of piano design and construction, the physical properties of sound (acoustics), and how the components inside pianos create sound.

219 How to Change the World in 30 Days

30 Participants

How often have you watched the news and thought, “that shouldn’t happen!” or “if I ruled the world, I would...”? This 90-minute class is your chance to identify a law or government policy that you want to change; be a key policy maker who has influence and the tools to make it happen. Participants will leave with an action plan and/or a letter to a policy maker. **You are welcome to bring a tablet or laptop to this class to help with letter writing. (Phones aren’t really useful.) Those who don’t bring a laptop or tablet will engage in the time-honored tradition of writing a postcard by hand.

220 Introduction to Fondant

25 Participants

We will be teaching participants how to cover cakes in fondant and how to make fun decorations, too!

221 Campus Police K9 Demo

50 Participants

Observe MSU’s working dogs! The MSU Department of Public Safety will bring their K9s for you to meet while observing part of their training day.

222 Knockout Anatomy

50 Participants

Join us for a dynamic blend between the anatomical sciences and martial arts. Learn the anatomy behind various martial arts maneuvers and practice these techniques yourself. Knockout Anatomy will leave you with a greater appreciation of the human body and the vulnerability of its form.

223 Learn Tamil Culture

30 Participants

Tamil is one of the classical languages in the world. Its origin is unknown. This culture is rich with an abundant of art forms. This session will open the door to reveal a world totally exotic and inspiring.

224 Learning to Love Writing and Words

100 Participants

Join the author of the award-winning children’s picture book, “Mr. Mouthful Learns His Lesson.” The author will show on screen the steps in making it (including choices that a writer must make) and the book itself. Then he will talk about words, wordplay and important features of language. In school visits, kids and teachers have loved the presentation and the book itself.

225 Let’s Create a TV Ad

50 Participants

Students get to choose their own product/brand that they wish to create a TV storyboard of (which they get to keep).

226 Life Beneath the Naked Eye

15 Participants

This session will highlight the use of a scanning electron microscope, which is useful for research and education in science and engineering. We will examine insects and a variety of materials at high magnification to understand their structure and function. Children of all ages are invited to a hands-on experience, using a high powered microscope.

227 MSU Bug House

30 Participants

Come to the Bug House to see displays of insects from around the world as well as have the opportunity to see, touch and hold live insects, tarantulas and scorpions.

228 Pizza 101: How to Play with Your Food

45 Participants

Participants of this session will see a demonstration on how to prepare and handle pizza dough and different methods of baking. Then they will get to prepare their own pizza!

229 Ready, Set, Mush

30 Participants

Welcome to the world of sled dogs! Participants will learn about dog sled training, racing and get to meet a real sled dog!

230 Rethink your Drink

16 Participants

Participants will learn about sugar in popular drinks and practice making healthy flavored water and smoothies.

231 Running Cars on Plants

30 Participants

In this class, we will discuss why it is important to research biofuels and learn the basics of how biofuels are made. We will also conduct the Biofuels in a Bag hands-on experiment where we observe fermentation.

232 Science of Star Wars

140 Participants

Learn about the science behind light sabers, planets, and space travel in Star Wars and their real life counter parts. We will explore how modern space craft and understanding of planets and moons compare to those found in Star Wars.

233 So You Want to Work in the Video Game Industry?

20 Participants

Participants will learn what it takes to get a job in the video game industry and how to get there and work on making their own video games.

234 The Spartan Dollars and Cents

30 Participants

Let's talk money! Through fun, hands-on activities, we will explore the world of finances and increase your money smart knowledge.

235 Tricking your Brain: Memory and Attention Illusions

30 Participants

In this session, we will demonstrate how your brain can be tricked, and do experiments to see whether children or adults' brains are more easily fooled. Participants will learn about how psychologists study attention and memory, and how you can improve your skills at any age!

236 Ultrasonography with Sheep: Is she pregnant?

12 Participants

Ultrasonography is a technique that gives doctors and veterinarians a "live-stream" view into the body. It is commonly used during pregnancy to look inside mom and make sure the developing baby is healthy. Come join us in this unique session where you will be able to see what the veterinarian sees and participate in ultrasound exams on pregnant sheep.

237 Watercolor Painting on Cold Press Paper

20 Participants

Learn the art of watercolor painting with easy techniques for all ages to enjoy.

238 Where Does Milk Come From?

25 Participants

Tour the MSU Dairy Teaching and Research Center and learn all about how dairy cows provide us with healthy dairy products. You will get to milk a cow and see inside our famous cows with a window in their stomach. MSU ice cream is provided at the end of the tour!

239 Zeke the Wonderdog!

75 Participants

Zeke the Wonderdog and friends will be putting on a fun event with group participation. Learn how to teach a dog a new trick and a few will be lucky enough to teach a trick to Zeke!

240 First Lemonade Stand

24 Participants

Most successful entrepreneurs had early experiences in running their own business. Your business idea might be a lawn service, dog walking, baby sitting, or even arts and crafts. This class introduces you to the idea of starting your own business for fun and profit.

241 Having Fun with the Business Model Canvas

50 Participants

The Business Model Canvas is a great way that entrepreneurs start out with their idea to make sure that it is viable and that the people want it. This session will use the canvas but put a fun spin on it with the children's ideas of a new company and how they can explore it with their grandparents.

243 Thy Praises, MSU: University Traditions Past and Present

50 Participants

Michigan State has a long history of interesting traditions. We will explore some of the customs that have defined the Spartan student experience over time. While this session focuses on traditions, it is far from traditional!

SESSION 3: WEDNESDAY, JUNE 26

300 A Smashing Time with Nuclei

24 Participants

See MSU's National Superconducting Cyclotron Laboratory, a world-leading nuclear research facility. Get hands-on with a model "nucleus" to learn how and why we smash nuclei at half the speed of light, then tour the lab and learn all about the Facility for Rare Isotope Beams!

301 Animal Disease Detectives

50 Participants

Animals can't tell you when they're sick or point to where it hurts. Learn how veterinarians and laboratory technologists help to diagnose disease and protect both animal and human health. Participants will investigate and diagnose cases on their own.

302 Arboriculture at MSU

25 Participants

See how MSU's Landscape Services cares for the trees on campus on this walking tour. Explore some of the equipment our arborists use and see them in action.

303 Are You the Next Olympic Athlete? Measuring Movement in Health and Disease

15 Participants

The session will cover technology used to analyze human movement and how it can be used to assess motor skill both in health and disease.

304 Be an Ancestry Detective

40 Participants

In this class, we will generate a family tree together and learn how to use free online tools available through your local library. Attendees will learn how to conduct family interviews in order to record multi-generational family traditions and memories.

305 Build a Science Center

30 Participants

Imagine a science center where you can see an exhibit, play with it, experiment with it, break it, repair it, rebuild it, improvise it, make a copy and take it home. Now, imagine that the entire science center is built by students like YOU.

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50 Participants

Experience being a Spartan Nurse in the simulation lab and learn how to take vital signs, listen to lung sounds, and start an IV. Race against participants in a scavenger hunt of the lab,

meeting some of our skills task trainers including Trach Jake, Surgical Sally, Chester Chest, and of course, our favorite patient, HAL—a simulation manikin that breathes, blinks, and even talks as you provide nursing care! Experience drawing up medication from a vial, but learn fast, or you might be the most unfortunate victim of the syringe water fight! These are just a few of the activities you may experience while working as a Spartan nurse-in-training in an environment that looks and feels like a hospital!

331 The Joy of Chemistry

200 Participants

This program will highlight the excitement of chemistry with a fun variety of demonstration exhibitions and hands-on activities. Thrill to the color-changing oscillating reaction! Make a magnet levitate using a superconductor! Do the chemiluminescent “Firefly” reaction! We’ll close by doing a spectacular thermite reaction, which spews large amounts of molten iron. Participants will take home a sample of Spartan green Slime they will make themselves and will make tasty liquid nitrogen ice cream.

332 Spartan Dollars and Cents

30 Participants

Let’s talk money! Through fun, hands-on activities, we will explore the world of finances and increase your money smart knowledge.

333 Tricking your Brain: Memory and Attention Illusions

30 Participants

In this session, we will demonstrate how your brain can be tricked, and do experiments to see whether children or adults’ brains are more easily fooled. Participants will learn about how psychologists study attention and memory, and how you can improve your skills at any age!

334 Watercolor Painting on Cold Press Paper

20 Participants

Learn the art of watercolor painting with easy techniques for all ages to enjoy.

335 Where Does Milk Come From?

25 Participants

Tour the MSU Dairy Teaching and Research Center and learn all about how dairy cows provide us with healthy dairy products. You will get to milk a cow and see inside our famous cows with a window in their stomach. MSU ice cream is provided at the end of the tour!

336 Where Does Our Food Come From? the Amazing Honey Bee!

40 Participants

A large portion of the world food supply is directly or indirectly affected by honey bee pollination. We’ll learn about the honey bee, their impact on our food supply and how we can help this amazing insect!

337 Words that Change the World: the Superpower of Writing

30 Participants

Have you ever been told to “use your words?” Here’s how to use your words to really make your point. We’ll consider what makes some words so much more effective than others, and how people have used words to change the world. Then you’ll write an effective message to someone who can, in fact, help you change the world. **You are welcome to bring a tablet or laptop to this class to help with letter writing. (Phones aren’t really useful.) Those who don’t bring a laptop or tablet will engage in the time-honored tradition of writing a postcard by hand.

338 Zeke the Wonderdog!

50 Participants

Zeke the Wonderdog and friends will be putting on a fun event with group participation. Learn how to teach a dog a new trick and a few will be lucky enough to teach a trick to Zeke!

339 First Lemonade Stand

24 Participants

Most successful entrepreneurs had early experiences in running their own business. Your business idea might be a lawn service, dog walking, babysitting, or even arts and crafts. This class introduces you to the idea of starting your own business for fun and profit.

340 Having fun with the Business Model Canvas

50 Participants

The Business Model Canvas is a great way that entrepreneurs start out with their idea to make sure that it is viable and that the people want it. This session will use the canvas but put a fun spin on it with the children’s ideas of a new company and how they can explore it with their grandparents.

SESSION 4: THURSDAY, JUNE 27

400 A Basketball Player, Alien Monster, and Wonder Woman Got on a Bus: Fiction Writing through Games

26 Participants

This is a game designed to push people's imagination and creativity by giving writing genres, spark words, scenarios and other prompts to get folks writing. Participants will also create a book cover for their new text and have the opportunity to share their stories with others.

401 Amazing Animal Adaptations

50 Participants

Animals are amazing! From spots to stripes and horns to teeth, animals are equipped with a wonderful array of adaptations to help them survive in the wild. Join Potter Park Zoo as we visit with live animals and explore artifacts and bio facts while learning about some of the fascinating, cool, and sometimes weird physical and behavioral adaptations found in the animal kingdom.

402 Air Gun

32 Participants

In this course participants will have hands-on experience shooting an Olympic-style air rifle and air pistol. The session includes a safety briefing and an introduction to shooting fundamentals.

403 Archery

22 Participants

Class will begin with a quick safety briefing and each person will be fitted with the proper safety gear and archery equipment. The MSU Archery Team will be instructing on the proper form for archery.

404 Be an Ancestry Detective

40 Participants

In this class we will generate a family tree together and learn how to use free online tools available through your local library. Attendees will learn how to conduct family interviews in order to record multi-generational family traditions and memories.

405 Beef Cattle Awesomeness: A Crash Course in Modern Beef Production

30 Participants

Get an insider's look at the MSU Beef Center cow/calf and feedlot units, while learning about the management of a modern beef cattle operation. Learn why beef cattle farmers need to be concerned with forage production, growth and development, genetics, breeding, nutrition, health, beef quality, and so much more. See why cows are so cool - and why modern beef cattle production is both an art and a science.

406 Biology of the Spotted Hyena

30 Participants

Join us in learning about the fascinating spotted hyena, studied by Dr. Kay Holekamp's laboratory for 30+ years. See and touch skulls, play games, and learn about what makes hyenas so unique in the animal kingdom.

407 Build a Science Center

30 Participants

Imagine a science center where you can see an exhibit, play with it, experiment with it, break it, repair it, rebuild it, improvise it, make a copy and take it home. Now, imagine that the entire science center is built by students like YOU.

408 Building Your Ideal Neighborhood

40 Participants

This activity-based session will look at how the availability of resources impact communities. In teams, participants will build their own communities using Legos and other materials supplied. Each team will have different materials or "resources" available to them. Following the "building" phase, communities will be compared, and an interactive discussion will take place.

409 Calming and Relaxation

25 Participants

Life gets busy and pretty hectic sometimes. Wouldn't it be nice to know some ways to keep calm and take a moment for yourself? In this class we will discuss different methods for relaxation, including breathing techniques and even some laughter, all to help you through those tough moments. We will also make relaxing calming jars that you can take with you for those times when you just need to unwind. We will then end our class with a muscle relaxation technique that will leave you feeling refreshed and renewed.

410 Cash Conversations with the Credit Union **25 Participants**

Do you know the similarities and differences between credit unions and banks? Have you been struggling to save money for something you really want? Join the MSU Federal Credit Union through an interactive journey to learn about financial institutions, the differences between needs and wants, the real cost of your wants and how to save money to achieve your goals.

411 Crazy for Crêpes: Exploring a French Culinary Tradition **20 Participants**

Crêpes are thin pancakes served as either snacks or meals, which are popular throughout the French-speaking world. In this course we will learn how to make them, enjoy the fruits of our labor, and learn a little French culture, history and language along the way. All recipes will be included so you can enjoy these delicious Gallic goodies again at home.

412 Curious Crew Investigation: Candy Chemistry **50 Participants**

Making candy is a science. It involves using many chemicals. These chemicals are SAFE to eat; however, this investigation requires no taste testing at all. In this session, learn how chemists work with chemicals used as ingredients to make candy. What happens when candy chemists PUMP sugar, corn syrup, flavoring mix and lactose with pressurized carbon dioxide gas? If you're curious, join WKAR Family in discovering the answer.

413 Disney Trivia **25 Participants**

Fun for all ages! Jeopardy style game that is all about Disney! Work as a team to solve the answers. Participants will receive goodie bags and the winning team will earn a prize in addition to bragging rights.

414 Engineering Design with Popsicle Sticks and Tape **40 Participants**

An introduction to engineering design is provided through dialogue, the concept of design goals, and hands-on activities. All participants will use their ingenuity to build a tower of popsicle sticks and tape illustrating engineering design processes.

415 For All The Marbles **12 Participants**

How to color/dye fabric using the ancient technique of marbling. Learn how to marble t-shirts, fabric (for quilting and sewing), tennis shoes, etc. If it can be wet, it can be marbled.

416 Geodes **100 Participants**

Geodes: What are they? How are they formed? Where are they found? You will learn about geodes and also get to pick one to break open!

417 History Beneath Our Feet: The Archaeology of MSU **12 Participants**

The session will start with a brief presentation on archaeological discoveries on MSU's campus. Participants will then clean and learn how to identify and date artifacts found at MSU.

418 History of Native American Agriculture **40 Participants**

Join Beal Botanical Garden curator Peter Carrington as we review the important history of the agriculture of the first Americans. These accomplished agronomists developed many of the most important crops grown today. One of the world's ten centers of agricultural domestication is right here east of the Mississippi in the United States.

419 How do Sheep Make Wool? **25 Participants**

Visit the MSU Sheep Teaching and Research Center and visit with lambs and ewes. Learn how we care for our sheep, how they grow wool, what they eat and how they produce meat for us. *This is a one hour session.*

420 Introduction to Piping **25 Participants**

Participants will learn how to make cake borders and decorations with frosting. Each person will be given their our mini cake to decorate.

421 Learn Tamil Culture **30 Participants**

Tamil is one of the classical languages in the world. Its origin is unknown. This culture is rich with an abundant of art forms. This session will open the door to reveal a world totally exotic and inspiring.

422 Learning to Love Writing and Words

100 Participants

Join the author of the award-winning children's picture book, "Mr. Mouthful Learns His Lesson." The author will show onscreen the steps in making it (including choices that a writer must make) and the book itself. Then he will talk about words, wordplay and important features of language. In school visits, kids and teachers have loved the presentation and the book itself.

424 Life Beneath the Naked Eye

15 Participants

This session will highlight the use of a scanning electron microscope, which is useful for research and education in science and engineering. We will examine insects and a variety of materials at high magnification to understand their structure and function. Children of all ages are invited to a hands-on experience using a high powered microscope.

425 Make Your Own Book!

16 Participants

Create books the way artists do—by hand! We'll start by looking at some very unusual books in MSU's collection. Then, we'll make three different book structures, and decorate them!

426 MSU Bug House

30 Participants

Come to the Bug House to see displays of insects from around the world as well as have the opportunity to see, touch and hold live insects, tarantulas and scorpions.

427 Physics is Fun!

250 Participants

Come and see interesting and exciting physics demonstrations about the most important physical laws governing our world.

428 Pickleball for Families

20 Participants

Participants will learn the fundamental rules and strategies for Pickleball. The book "Smart Pickleball" will be provided, one copy per family.

429 Rain Cloud Groundwater Simulator

10 Participants

The Lansing region receives its drinking water supply from groundwater (the Saginaw Aquifer). The simulator teaches the basics of groundwater recharge and groundwater flow through the aquifer.

430 Ready, Set, Mush

30 Participants

Welcome to the world of sled dogs! Participants will learn about dog sled training, racing and get to meet a real sled dog!

431 Seasons and the Moon (Planetarium)

140 Participants

Listen to stories of the stars told by Native American Master Storytellers. In this show, you will hear two stories. "Spring Defeats Winter" retold by Joseph Bruchac (Abenaki) and "The Girl Who Married the Moon" retold by Gayle Ross (Cherokee).

432 So You Want to Work in the Video Game Industry?

20 Participants

Participants will learn what it takes to get a job in the video game industry and how to get there. They will also work on making their own video games.

433 Teaching Art Processes to Preschoolers

8 Participants

Learn and experience art techniques. You will then have the chance to learn strategies to teach them to children at the Child Development Laboratories.

434 Ultrasonography with Sheep: Is She Pregnant?

12 Participants

Ultrasonography is a technique that gives doctors and veterinarians a "live-stream" view into the body. It is commonly used during pregnancy to look inside mom and make sure the developing baby is healthy. Come join us in this unique session where you will be able to see what the veterinarian sees and participate in ultrasound exams on pregnant sheep.

435 Vermicomposting: Fun with Worms

30 Participants

Participants in this class should expect to learn the basics of composting, with worms! Using red wigglers, learn how a worm can eat their weight in food waste each day. Learn how to make a habitat for worms and how to vermicompost at home to divert from the landfill and produce great organic fertilizer!

436 Watercolor Painting on Cold Press Paper

20 Participants

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437 Where Does Milk Come From

25 Participants

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441 Thy Praises, MSU: University Traditions Past and Present

50 Participants

Michigan State has a long history of interesting traditions. We will explore some of the customs that have defined the Spartan student experience over time. While this session focuses on traditions, it is far from traditional!

TUESDAY, JUNE 25 EVENING ACTIVITIES

Art Party at the MSU Broad

Children and grandparents are invited to MSU's contemporary art museum for a night of curiosity and creativity! There is something for everyone, including self-guided gallery tours, conversations with roving docents, and drop-in art activities. Don't miss this evening of creative fun!

Bug House (2 sessions)

Join the experts at the MSU Bug House as they give an introduction to insects, how they develop and how they relate to other arthropods. Participants will have the opportunity to view displays of insects as well as view and handle live insects and arthropods.

Geodes: Hidden Quartz

What are geodes? How are they formed? Where are they found?

Movie

Enjoy snacks while sitting back and enjoying a family friendly movie.

MSU Pompon

Get up and get moving with the MSU Pompon team—2017 Collegiate Champs! Learn about the importance of staying active every day! The team will lead a fun warm-up routine followed by a short pompon routine instruction. Time to show off your true Spartan Spirit!

Mush! Dog Sledding and Training

Musher and educator Tasha Stielstra will highlight the world of sled dog training and racing in Michigan's Upper Peninsula. Tasha will teach you about sled dogs and how they work together as a team. You will learn the rules of mushing, get to meet a real Alaskan Husky and watch as our model sled dog team works together. Sit back and relax during this entertaining and interactive presentation.

Open Gym: Basketball

Enjoy playing basketball in the gym of IM East.

Sweets, Treats and Games

Spend time playing board games, cards, and building puzzles while enjoying snacks and drinks that are provided.

Improve Your Physical Therapy IQ

Discover how physical therapists help people improve their ability to move, perform daily activities, recover from injury and live healthy, active lifestyles. Get up and get active! Learn and perform treatments commonly used in physical therapy for a variety of medical conditions.

Music in the W.J Beal Botanical Garden

Each summer, the MSU College of Music hosts a free concert series called "Music in the Garden." The W. J. Beal Botanical Garden plays host to select student groups presented by the MSU College of Music. These 1-hour concerts happen rain or shine (rain location is the Music Building, 333 W. Circle Drive), and the MSU Food Truck and free Dairy Store ice cream (while supplies last) are on site for the audience to enjoy while they listen to the music! Join us with your blanket or lawn chair and enjoy the ambience of music and garden flora!

Build a Science Center

Imagine a science center where you can see an exhibit, play with it, experiment with it, break it, repair it, rebuild it, improvise it, make a copy and take it home. Now, imagine that the entire science center is built by students like YOU.

Skywatchers of Africa (Planetarium)

For thousands of years, Africans have used their knowledge of the sky to build their societies, shape their spiritual lives, and meet their physical needs for survival. Skywatchers of Africa highlights the diversity of African astronomy, examines cultural uses of the sky that developed throughout history, and celebrates our shared human experience. Suitable for grades 5 and up.



History of Sparty

You have seen him at athletic events, in parades, around campus on game day, in ESPN commercials, at weddings, birthday parties, alumni club events, and promoting literacy to children in schools. He is everywhere; he is loved; and he is an embodiment of what it means to be a Michigan State Spartan. Have you ever wondered how our beloved Sparty became the MSU icon he is today? In this session you will learn the origins of Sparty, the Sparty Mascot Program, and get a rare insiders look at what it is like to portray Sparty. There are many exciting aspects of the program that most Spartans do not have the opportunity to witness. Join us for an in depth look of Sparty, the gentle giant.

Teamwork and Timbers

The connections to our rural heritage are disappearing rapidly from generation to generation. Relive those connections through stories as you work together to construct a timber frame barn. No tools or previous knowledge is necessary! The Michigan Barn Preservation Network board members will take you through the steps to assemble the framework of a one quarter scale barn similar to those still seen in the rural Midwest. *This is a one hour session.*

Scavenger Hunt

Seek out hidden gems and find the clues while exploring our beautiful campus in a fun filled scavenger hunt! There will be checkpoints along the way as you explore and navigate MSU's historical campus. All those who complete the scavenger hunt can enter into a drawing for prizes!

Free Time!

Play games in the lobby, hang out in the local Sparty's, explore campus or walk to the Dairy Store and enjoy ice cream! This will give you the time to do things and visit the places on campus you don't normally get to see!

MSU Food Bank Tour

The tour will entail an explanation of our operations, who we serve, when we are open, how we are sustained, as well as a brief history of the food bank.

Dazzleball!

A mix of sports that's sure to delight, dazzleball just makes sure there is a ball in flight! It is played with a soccer ball, or Frisbee, or football, or tennis ball . . . you never know what is coming next!

Good Form Running (GFR)

is a simple to understand technique for running healthier, easier and faster. GFR is a product of years of teaching clinics, studying running philosophies, and personal meetings with some of the greatest running minds. Instead of a complex biomechanical analysis, GFR focuses on three simple, essential steps focused on running light and running easy. With simplicity as a primary focus, GFR has positively impacted thousands of runners since 2006. This class is also called Intro to Good Form Running

Good Form Walking (GFW)

Based on the findings from the development of GFR, combined with further discussion, exploration, practice and implementation, Good Form Walking (GFW) evolved as a method to help walkers of all ages and abilities move forward more efficiently and healthier. Learning the three simple components of GFW can help people to walk without injury, with a well-balanced stride and with renewed vigor. GFW instruction has helped hundreds of people walk better, farther, and more frequently!

Stretch Strengthen & Roll (SSR)

In this introductory class, we will discuss common muscle imbalances and why they occur, demonstrate and practice dynamic and static stretches, then demonstrate and practice strengthening exercises, and finally we will go over the importance of myofascial release and how to do it effectively.



THANK YOU

Grandparents University would not be possible without the dedication and hard work of the following units and sponsors.

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