

TimeSlot	Session Time	SessionID	Session Name	Description	Presenter	CoPresenter
<b>Session A Tuesday PM 1:30-3</b>						
	<i>Repeated: B102</i>	A101	Exploring the Human Brain through Zombie Behavior	Have you ever wondered why zombies act the way they do? Join us in exploring how different parts of the human brain influence our abilities and see how zombie brains differ from ours. Come create your own zombie "brain" and investigate how the brain affects your behaviors in a set of mini-experiments.	Naomi Aldrich	Amarachi Nnebedum
	<i>Repeated: B202</i>	A201	Hanging in the Balance	Building on the art of Alexander Calder, the science of balance and center of gravity and the math of statistics, we will create mobiles of amazing shapes and designs. Fuse your creativity with your curiosity and create a brand new balanced beauty. (This session is run by a mathematician and artist working together.)	John Golden	Heather Minnebo
		A301	Sampling of Living and Non-Living Factors in an Ecosystem	On GVSU's beautiful campus, we will head out into the field and do an ecological survey of the living and non-living factors in a given ecosystem. Plant and animal identification, drawings, and interactions will be explored. Emphasis will be on the balance in an ecosystem that provides the overall health of community.	Erin McNally-Goward	
	<i>Repeated: B402</i>	A401	Exploring Rocks and Minerals	Do you have a curiosity about rocks and minerals? We'll learn what minerals we consume as part of our daily lives, simulate volcanic eruptions using Mentos, and inspect minerals from the GVSU collection that range from meteorites to Petoskey stones. We will test your ability to make observations and identify minerals and rocks. We will examine stone buildings and boulders on campus and unravel the story they have to tell us about how they formed. Then, take home a rock from the GVSU Rock Pile!	Peter Riemersma	
<b>Session B Tuesday PM 3:30-5</b>						
	<i>Repeated: A101</i>	B102	Exploring the Human Brain through Zombie Behavior	<i>see description from A101.</i>	Naomi Aldrich	
	<i>Repeated: A201</i>	B202	Hanging in the Balance	<i>see description from A201.</i>	John Golden	Heather Minnebo
		B302	Exploring Earthquakes	Activities in this session will help participants discover how earthquakes are generated, how they move through the earth, and how they impact humans.	Ginny Peterson	Pat Videtich
	<i>Repeated: A401</i>	B402	Exploring Rocks and Minerals	<i>see description from A401.</i>	Peter Riemersma	
<b>Session C Wednesday 8:30-10 AM</b>						
		C203	Flying Fruit: Science in Action!	How do flowering plants disperse their offspring when they are literally rooted to the spot? Come investigate (play with) maple helicopters to explore one tree's solution and practice thinking scientifically, too!	Chris Dobson	
		C303	Squishy Circuits	You are never too young or too old to learn how circuits work!! Learn how electricity makes everyday objects, like light bulbs, work using specially formulated squishy dough.	Richard Vallery	
	<i>Repeated: D504</i>	C503	Picturing the Past	Come discover selfies through the centuries! This hands-on exploration will take you through the strange and fascinating ways people have captured images through photography from the 1840's to the present. Participants will examine unique items from the library's special collections, make their own cameras, prints, and more!	Lindy Scripps Hoekstra	

	This is a two-part session.	CD103-104	Hands-on Science on the W.G. Jackson Research Vessel	Come on a water quality testing excursion on a research vessel. We will explore Muskegon Lake and see Lake Michigan. Be a scientist for the morning as you collect samples and analyze them in the onboard laboratory. Learn about invasive species and how we can protect our lakes. (This session combines sessions C & D. The times for this session have been adjusted to accommodate travel time. You must provide your own transportation to AWRI in Muskegon.)	AWRI Staff	
		C603	Free Time	No session. Family free time.	None.	

## Session D Wednesday 10:30 AM-12 N

	Repeated: F306	D304	How are we like fruit? Exploring Genes and DNA	Do you like to play with your food? Come and mash some up and discover what we all have in common with fruit! You will discover how genes give us our traits, learn what they are made of, and see why we sometimes look like our parents (and grandparents). Participants will extract the DNA from their favorite fruits and learn how scientists visualize and analyze it.	Matt Christians	
		D404	GVSU Farmers Market and the Sustainability Initiative	Visit the GVSU Sustainable Agriculture Project (SAP) Farm hoop houses and learn about the GVSU Farmer's Market and the SAP farm in line with the GVSU sustainability initiative. A scavenger hunt through the farmer's market will allow opportunities for grandparents & grandkids to find healthy produce. Then enjoy lunch at the market with an opportunity to shop for fresh produce.	Kay Hart	Sue Sloop
	Repeated: C503	D504	Picturing the Past	<i>see description from C503.</i>	Lindy Scripps Hoekstra	
		D604	Free Time	No session. Family free time.	None.	

## Session E Wednesday 1:30-3 PM

		E105	Making Sense of Our Senses	Inspire your senses in this interactive exploration of the five basic human sensory systems. We will learn how and why grandkids and grandparents sensory systems differ in the stimuli we can detect.	Dan Bergman	
	Repeated: F206	E205	You are What You Say	Are you always searching for the right words to say? Words are an important part of our daily communications and tell others who we are. This session will explore how to choose the right words for the right situation and audience.	Carl Brown	
		E305	How Wet is the Earth	In this session, random samplings using Google map will be used to estimate the proportion of the Earth covered with water.	Paul Stephenson	Neal Rogness
	Repeated: F406	E405	Energy is Everywhere	How can you make a ball bounce higher? How can you make a car go faster? The answer is energy, but energy has many forms! This session uses hands-on activities to investigate various types of energy and the principle of energy conservation.	Karen Gipson	Rich Vallery
		E505	Summertime Snacks	Get your mini-chefs excited about eating healthy and nutritious foods. Learn how to make fun kid friendly snacks, dinner, and desserts that your kids will not only love to make and eat, but are also good for them!	Raymond Kusmack	
		E605	Free Time	No session. Family free time.	None.	

## Session F Wednesday 3:30-5 PM

	<i>Repeated: G407</i>	F106	Puppetry Workshop: Build, Write, Perform!	YOU are the star in this hands-on workshop! After drawing inspiration from examples of puppetry around the world, participants will create their own puppets and invent an original play. Will it be a space adventure? A tale of unlikely friendship? An amazing, new discovery? Your imagination is the limit. Finally, participants will perform their shows on the professional stage used by the GVSU Puppetry Club. But don't let the fun stop there! Take your puppets home to share your creativity and confidence with family and friends.	Jason Yancey	
	<i>Repeated: E205</i>	F206	You are What You Say	<i>see description from E205.</i>	Carl Brown	
	<i>Repeated: D304</i>	F306	How are we like fruit? Exploring Genes and DNA	<i>see description from D304.</i>	Matt Christians	
	<i>Repeated: E405</i>	F406	Energy is Everywhere	<i>see description from E405.</i>	Karen Gipson	Rich Vallery
		F606	Free Time	No session. Family free time.	None.	

## Session G Thursday 9-10:30 AM

		G107	Intro to Law Enforcement	This course will focus on some of the activities that a law enforcement officer might perform in the course of his or her regular duty shift. We will provide classroom information as well as allow participants to observe some of the special skills, such as physical training, the process of making traffic stops, defensive tactics, criminal investigations and other special unit functions (SWAT and/or K-9).	Williamson Wallace	GVSU Police Academy
		G207	Family Engineering	Explore the world of engineering through fun, hands-on activities. Learn how engineers are inspired by nature and participate in design challenges that will stretch your creativity and problem solving skills.	Karen Meyers	Kathy Agee
		G307	WGVU Public Media- PBS & NPR: Behind the Scenes Look	Do you ever wonder how your favorite WGVU Radio program gets to your car radio, or how your favorite WGVU TV program magically appears on your television set? Take a behind the scenes tour of WGVU Public Media to learn how this all comes together. See a production control room, edit suite, television and radio studios and a case full of Emmys for outstanding WGVU productions. You may even bump into one of the WGVU TV or Radio personalities during the tour.	Steve Chappell	
	<i>Repeated: F106</i>	G407	Puppetry Workshop: Build, Write, Perform!	<i>see description from F106.</i>	Jason Yancey	