



**“Innovating Agri-
Science Through the
Art of Application”**
2019 Ohio Agricultural
Education Summer
Conference

A collaborative function of Team Ag Ed.

June 11 – 13, 2019 - The Ohio State University, Columbus, Ohio

Tuesday, June 11th

Tuesday Tour Descriptions:

<p>A0 Agribusiness & Production Systems</p> <p>Max Capacity 40</p>	<p>Theme: <i>A visit with Ohio’s Electric Cooperatives on how they are piecing Ohio’s energy puzzle together.</i></p> <p>Tour stops will include: OEC’s Central Ohio Lineworker Training (COLT) program uses state-of-the-art training in state-of-the-art facilities to develop best-in-class lineworkers for Ohio’s electrical co-ops. Participants will get a firsthand opportunity to train like a lineman and learn about how their students are the future of Ohio’s electrical co-ops. Consolidated Cooperative Community Solar Field - Investments in community solar are expanding across Ohio. This stop will share how alternative energy is helping diversify generation to meet energy demand.</p>
<p>A2 Animal Science & Management</p> <p>Max Capacity 12</p>	<p>Theme: <i>Take your class on a Virtual Field Trip to an Ohio Pig Farm from the comfort of your own classroom!</i></p> <p>Turn your classroom into a virtual pig farm through a one-of-a-kind learning experience as you connect with a real Ohio pig farm for a live video tour and chat with a farmer. Your class will get a peek inside a pig barn and learn what it takes to raise pigs and have a live Q&A session with a farmer. (This session is distance learning opportunity at the Ohio 4-H Center provided by the Ohio Pork Producers Council and will only be available in the afternoon Tuesday, June 11.)</p>
<p>A3 Agriculture, Food, and Natural Resources Bioscience</p> <p>Max Capacity 30</p>	<p>Theme: <i>Why is animal biotechnology being used at Nationwide Children’s Hospital?</i></p> <p>Nationwide Children’s Hospital Research Laboratories</p> <p>This field trip will expose educators to the importance of animal models and how they play vital roles in human health. This will be a hands-on experience working with the lab employees learning everyday biotech skills used in animal and human research.</p>



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<p>A5 Horticulture</p> <p>Max Capacity 20</p>	<p>Theme: <i>Assessment and Monitoring of Streams with the Ohio EPA Division of Surface Water</i></p> <p>The Great Olentangy River During this session, we will have a field component where you will learn how Ohio EPA staff collect water quality and fish assemblage samples, use real-time water quality monitoring equipment, and how biological indicators point to the health of a waterbody. you will learn about the different aspects of Ohio EPA’s Division of Surface Water monitoring program. We will have a classroom component where presenters will talk about their jobs in water quality monitoring, careers at Ohio EPA, watershed assessments, and the NPDES program, to name just a few items.</p>
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<p>A6 Natural Resource Management</p> <p>Max Capacity 15</p>	<p>Theme: <i>Crash Course in Conservation - lessons learned in habitat restoration and park development</i></p> <p>Gallant Farm Park and Gallant Woods Park Learn more about habitat restoration, wetland construction, reforestation, prairie establishment and management, invasive plant management, healthy soils, cover crops, net boxes for bluebirds, tree swallow and purple martins. A SWCD education contact will conduct demonstrations including classroom activities and a stream simulator table. The tour will be outdoors and may include off-trail hiking in wet and muddy areas.</p>
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<p>6:00 p.m. - 7:30 p.m.</p> <p>Max Capacity 20 Per Option</p>	<p>Meet and Eat Dinner Excursion Option 1: Oktoberfest in June - Matt Winkle Option 2: Dessert at the Diner - Ryan Curtis Option 3: Ale’s & Wings - Tracy Dendinger Option 4: Taco Tuesday - Alyssa Bregel</p>	<p>Location: 1. Hofbrauhaus 2. Cap City 3. Miller’s Ale House 4. Condado</p>
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	<p>A1) Hardy Dose of Hydraulics for the Agriscience Teacher - Dewey Mann, Stephanie Conway, Bill Keck, and Cody McClain</p> <p>Are you looking for where to start or how far to go when it comes to discussing hydraulic systems in your classroom? Fear not! This session will provide you with a hardy dose of hydraulics; basic terminology, where to find simple/low-cost classroom teaching tools – including practice using them, up to advanced concepts such as interpreting schematics and building circuits.</p> <p>A2) Microscope Usage - Dayton Microscope, Dr. Kelly Rickabaugh from Greene County Career Center</p> <p>This session will target the skills and techniques of preparing slide mounts and handling microscopes to build your confidence in the lab.</p> <p>A3) GMO- What do you know? - A Breakout Game - Pam Snyder, Retired Ag Biosciences Teacher</p> <p>In this hands-on session, participants are presented a scenario and solve puzzles as they explore some of the conceptual knowledge, misconceptions and facts surrounding genetically modified organisms (GMOs). Inspired by popular breakout games/escape rooms, each puzzle encourages participants to utilize smartphone technology and teamwork to obtain answers that result in clues to open five different types of locks on two different boxes. The game naturally connects and encourages critical thinking, problem solving, scientific dialogue, cooperation, and content knowledge to one of the “hottest” trends in entertainment for young adults.</p> <p>A5) How Clean is the Water? - Heather Bryan, Education Projects</p> <p>During this session, you will participate in investigative labs that can be used in your classroom to help students understand the importance of water quality. Take part in inquiry-based lessons that relate to industry credentials, and help your students make direct connections between human activity and water quality. Is agriculture to blame for eutrophication? Help your students learn how to assess water quality and determine how nutrients are impacting local watersheds. All labs and activities are aligned to Ohio agricultural education standards.</p>	<p>Max Capacity 30</p> <p>Max Capacity 30</p> <p>Max Capacity 24</p> <p>Max Capacity 30</p>
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	<p>A6) Environmental Sciences Lesson Blitz - Charlie Schneider, Rob Brokaw, Andrew DeLong, Anna Creswell</p> <p>Struggle with activities for environmental science? Join expert teachers to experience four different lessons that you can take home and use in the classroom. Topics include: 1) Scientific names are necessary for students studying wildlife careers, learn clues on how to quickly and easily teach scientific names of 37 Ohio mammals. 2) Standards are one thing but being able to use it is what the workforce needs. Learn how to apply identification to analyze the environment around you. 3) Struggle teaching about solid waste management? Food helps! Learn how to construct an edible landfill to teach students how landfills are put together and work to protect the environment.</p>	<p>Max Capacity 30</p>
<p>4:00 p.m. – 5:00 p.m.</p> <p>Programming Session 1</p>	<p>1. Reflection in Action - Dr. Caryn Filson & Dr. Amanda Bowling, Department of Agricultural Communication, Education, and Leadership</p> <p>This session will highlight how reflection can enhance the teaching process. We utilize data from our recent research study with our 2019 Block students to guide the conversation and showcase best practices for practicing teachers on implementing reflection into their teaching.</p> <p>2. What can NAAE do for you? - Deanna Thies, NAAE Region IV VP and Rachel Scior, OAAE Past President</p> <p>The National Association of Agricultural Educators is an organization that is meant to serve you! Through this session Ag teachers will learn about a variety of resources at their fingertips to enhance knowledge of membership benefits, curriculum resources, travel opportunities and the award program through the NAAE.</p> <p>3. Technology and Apps in the Classroom - Stephanie Jolliff and Shelby Faulkner, Ridgemont</p> <p>Want to make your life easier? Want free resources to save you time and manage FFA, SAE and classroom activities? Come to learn tips and tricks that organize and simplify your life! We will introduce you to tried and true classroom technology strategies and free apps.</p>	<p>Max Capacity 30</p> <p>Max Capacity 30</p> <p>Max Capacity 24</p>



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Thursday, June 13th

Thursday Session Descriptions:

<p>8:30 a.m. – 10:30 a.m.</p> <p>Technical Session 3</p>	<p>A0) Making Business Management Engaging and Profitable! - Hannah Everetts, Edon</p> <p>Have you ever wondered how to make your business management course more engaging and relevant for students? During this session, you'll engage in discussion and have access to materials that will make your students WANT to take ag business! We'll discuss ways that students can run their own businesses, make money, and get plenty of shop time; while still implementing the Ohio agricultural education standards. This session will also include ways to incorporate SAE's and CDE's into your business management curriculum, and help students plan for career success. This session is presented by the 2019 OAAE Ideas Unlimited winner.</p> <p>A1) Friction Welding with Plastic - Adam Horner, New Regal/Hopewell-Loudon</p> <p>A2) GPS Cows, increase the knowledge and skills of high school students in emerging agri-tech. - Dr. Amy Cosby, Central Queensland University</p> <p>During this session, participants will learn about emerging livestock technologies, including GPS livestock tracking and how ranchers/farmers would like to use these to improve productivity, profitability and environmental sustainability of their businesses. Participants will take part in a hands-on session using their laptop and learn how to use ArcGIS to analyse a livestock tracking dataset. You will also learn how to collect your own data and how you can use this with students to find about more about animal behavior and set up a scientific investigation with your students.</p>	<p>Max Capacity 30</p> <p>Max Capacity 30</p> <p>Max Capacity 24</p>
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	<p>A3) Biotechnology is Not Scary! - Jennifer Foudray and Anton Kilburn, Global Impact STEM Academy</p> <p>In this hands-on session, participants are presented with various tools that are used in the classroom to explore biotechnology. Participants will use basic biotechnology equipment and will engage in lessons that accompany introductory skills. Some skills include: micropipetting and applied biotechnology mathematics (such as making solutions, dilutions and buffers), and macromolecule testing.</p> <p>A5) Choose Your Own “Googley” Adventure - Misty Ewry, School Improvement Consultant and Google Certified Trainer at Southern Ohio Educational Service Center, Kim K Adams- School Improvement Consultant</p> <p>Whether you are new to Google Applications and feel as though you are drowning or have been diving in, eager to try more things, this session is for you! Come and experience a Choose Your Own Googley Adventure where you decide how to test the waters of your learning, whether you are drowning, wading, or diving in. Rest assured, you are guaranteed that there is something you didn’t know in each of these Google Applications: Slides, Docs, Drawings, and Classroom. Be ready to explore, practice, and create in this hands-on session while gaining practical applications for your classroom!</p> <p>A6) What’s Up in Your Watershed - Linda Pettit and Amy Tressler, SWCD</p> <p>This session will introduce the participants to the concepts of watershed, runoff, non-point sources of pollution and erosion through hands on activities, simulations, models and related literature. Teachers will leave feeling confident in incorporating the activities and easy to make models in the classroom to teach students the concepts of watersheds and water quality.</p>	<p>Max Capacity 30</p> <p>Max Capacity 24</p> <p>Max Capacity 30</p>
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<p>10:45 p.m. – 11:45 p.m.</p> <p>Programming Session 2</p>	<p>1. The Future of Our Profession: A Conversation - Dr. Tracy Kitchel & Matt Winkle</p> <p>During this session, we will talk about the future of the profession. This session will be discussion-drive and will engage you with your colleagues on what we’re doing now as a profession and where we are heading. We will unpack what it means to be an agriculture teacher today and what it should look like in the future to 1. remain relevant in today’s society and 2. ensure we have continued interest in future generations of agriculture teachers. This presentation was part of 2017 conference and we look forward to continuing our conversation (you do not have to have attended the 2017 conference session to participate).</p> <p>2. New Ohio CDE: Biotechnology - Alyssa Bregel, and CDE Development Committee</p> <p>A new CDE is coming to Ohio! Attend this session to learn more about this opportunity for your students! During this session you will learn about the outline of the contest and see some samples of what the contest could look like. You will also have the opportunity to practice some of the skills demonstrated in the contest.</p> <p>3. Critical Conversations for Ag Education through Podcasts - Drew Bender, Mohawk & Rachel Scior, Westfall</p> <p>During this session, you will engage in resources and conversations that you can use in your classroom, FFA advising and teaching practices. We will discuss critical conversations in agricultural education and share resources to aid in informing those conversations. We will incorporate podcast resources such as Owl Pellets to guide conversations.</p>	<p>Max Capacity 30</p> <p>Max Capacity 30</p> <p>Max Capacity 30</p>
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	<p>4. Adding Relevance to Food Science Labs - Jeffrey Stimmell, Big Walnut and Dr. Mary Kay Pohlschneider</p> <p>What are the basic principles of Food Science? How do you teach them - how do you demonstrate them in a high school classroom? This session will help you to identify the important basics of food science and give you ideas about the applications. Mass transfer tends to be the most abstract idea for students, so the presenters will take you through two example labs that you can take with you when you leave! You will also get the context behind when and how these labs best fit into a food science class and will get sample assessment questions to use in your classroom.</p> <p>5. Can Standards Based Grading Work for You? - Anton Kilburn and Jennifer Foudray, Global Impact STEM Academy</p> <p>In this session, participants will explore how to utilize point rubrics to minimize grading subjectivity. Teachers will be exposed to how point-based rubrics were successfully implementing into the agriscience classroom. Point rubrics are also used to track embedded agriculture classes into the common core classroom via cross-curricular projects.</p> <p>6. Using your WebXam resources and tools to maximize instructional time - Ryan Curtis, ODE and Tracy Dendinger, Southern Ohio ESC</p> <p>Take a dive into WebXam reporting and learn how to identify the best practices to improving your instruction using student assessment data. Where do I find them? What do they tell me? How do I use them? Why does it matter?</p>	<p>Max Capacity 20</p> <p>Max Capacity 30</p> <p>Max Capacity 24</p>
<p>1:45 p.m. - 2:45 p.m.</p> <p>Programming Session 3</p>	<p>1. What is Micro-Messaging & Why is it Important? - NAPE-The National Alliance for Partnerships in Equity</p> <p>Micro-Messages are small, subtle messages we send and receive verbally and non-verbally. Most micro messaging is not intentional. We communicate values and expectations subconsciously. These messages can be supportive (micro-affirmations) or negative (micro-inequities). This webinar examines micro-messages that are common in out-of-school environments and how you can use micro-affirmations to strengthen your program.</p>	<p>Max Capacity 30</p>



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	<p>2. Teacher Lesson Series: Punnett Squares - Nicole Steinmetz, Riverdale</p> <p>NEW this year: Teacher Lesson Series. Current classroom teachers will teach a typical 45-minute lesson during this session. You will leave with their lesson plan and will have engaged in the activities from the lesson so that you are ready to incorporate it into your own classroom. You will also gain classroom management ideas while you are sitting in another teacher’s “classroom.” This session will cover Punnett Squares that can be incorporated into any genetics lesson.</p> <p>3. Teacher Lesson Series: Tax Thinking for the Business Owner - John Poulson, Pettisville</p> <p>NEW this year: Teacher Lesson Series. Current classroom teachers will teach a typical 45-minute lesson during this session. You will leave with their lesson plan and will have engaged in the activities from the lesson so that you are ready to incorporate it into your own classroom. You will also gain classroom management ideas while you are sitting in another teacher’s “classroom.” This session will look at the basics to being ready for handling employees, tax collection, and personal income as it relates to the business plan. We will look at some paperwork, website use and general thinking used in the Ag Business Management class.</p> <p>4. Teacher Lesson Series: Commodity Challenge - Donna Hohman, Carey</p> <p>NEW this year: Teacher Lesson Series. Current classroom teachers will teach a typical 45-minute lesson during this session. You will leave with their lesson plan and will have engaged in the activities from the lesson so that you are ready to incorporate it into your own classroom. You will also gain classroom management ideas while you are sitting in another teacher’s “classroom.” Give students a taste of some real-world grain marketing challenges. This simulation allows students to watch your local grain price and make sales as they see fit. Students must figure storage math and gross and net profit. You can even throw some shrinkage calculations in to the lesson. A spreadsheet and all worksheets will be shared. Our students love the game and challenge!</p>	<p>Max Capacity 20</p> <p>Max Capacity 20</p> <p>Max Capacity 20</p>
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	<p>5. Teacher Lesson Series: Corsages - Meredith Wolfe, Oregon Clay</p> <p>NEW this year: Teacher Lesson Series. Current classroom teachers will teach a typical 45-minute lesson during this session. You will leave with their lesson plan and will have engaged in the activities from the lesson so that you are ready to incorporate it into your own classroom. You will also gain classroom management ideas while you are sitting in another teacher’s “classroom.” This session will focus on making lapel corsages. You will practice making a bow and corsage, and then evaluate the cost and profit of a corsage.</p> <p>6. Teacher Lesson Series: Skeletal System - Christa Nealeigh, Miami Valley CTC</p> <p>NEW this year: Teacher Lesson Series. Current classroom teachers will teach a typical 45-minute lesson during this session. You will leave with their lesson plan and will have engaged in the activities from the lesson so that you are ready to incorporate it into your own classroom. You will also gain classroom management ideas while you are sitting in another teacher’s “classroom.” This session will cover Punnett Squares that can be incorporated into any genetics lesson.</p> <p>7. Pre-Service teacher reflection with the Ohio FFA Foundation - Lauren Corry, Ohio FFA Foundation</p> <p>This session is specific to pre-service agriscience education teachers. The Ohio FFA Foundation is offering a conference reflection and information about the upcoming years opportunities for pre-service agriscience education teachers.</p>	<p>Max Capacity 16</p> <p>Max Capacity 20</p> <p>Max Capacity 30</p>
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