# Thursday Preliminary Schedule

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| **8:30 - 9:30 am** | | | |
| Coding in Elementary Classrooms | Alisa | Wickliff | K-2, K-5, 3-5 |
| Camera Traps In The Classroom: Creating Authentic Learning Opportunities | Rachael | Polmanteer | K-12 |
| PTC Taster Lab: From Genotype to Phenotype. | Robert | Dennison | 6-12, College |
| The Science House Presents: Using Makey Makey Devices to Capture STEM Innovation | Michelle | Benigno | K-12, College, General |
| Exploration and Discovery through Maps: Teaching Science with Technology | Jenna | Hartley | K-12, College |
| Vocab out of the Box: Getting Students to Mastery with all that Vocabulary | Jess | Miller | K-2, K-5, K-8, K-12, 3-5, 6-8, 9-12, 6-12, General |
| Inquiry? Check. Increase in Student Learning? Not Yet. | Cherelle | Sanders | 3-5, 6-8 |
| KNOT--- THE LAST TIME | Michael | Welter | General |
| STEM is more than Rockets and Robots | Thom | OBrien | 3-5, 6-8, 9-12 |
| Connecting Ecology Concepts Globally – Modeling How Species Coexist Within Ecosystems | Tim | Guilfoyle | 9-12 |
| Innovation in Science and Engineering! Where do I start? | Judy | Day | 3-5, 6-8, 9-12, General |
| Viewing Science Through Different Lenses | Tammy | Lee | K-5 |
| Energy in Action | Teresa | Fulk | K-8 |
| Divide and Conquer | Faith | Freeman | 6-12 |
| 1 Class Period+ 1 Model System + 2 Cellular Processes= Success 4 Students! | Tamica | Stubbs | 6-12, College |
| The Envelope Please... It's a Winner! | Evalee | Parker | K-12 |
| TBD | Learn Ed | | |
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| **9:45 - 10:45 am** | | | |
| Presidential Awards for Excellence in Math and Science Teaching | Donna | Kenestrick | K-12, General |
| Harry Potter in Your Classroom | Judy | Walker | K-5 |
| Using Physics in Plastic Surgery: New Treatments for Bacterial Infections | Nicole | Levi-Polyachenko | 6-12, College |
| Good Google-y Moogly!!!! | Elizabeth | Harwick | 3-5, 6-8, General |
| Disciplinary Literacy - How to Read and Write Like a Scientist | Stacey | Wilson | K-5 |
| Teaching Evolution In Middle School | Amanda | Clapp | 6-8 |
| Bringing Math into the Biology Classroom | Robin | Bulleri | 9-12, 6-12 |
| Scientific Literacy and Community Awareness: A Farm-to-Table PBL | Ada | Lopez | 6-8, 9-12 |
| The Science House Presents: Enhancing your STEM program with data-collection technology | Gina | Barrier | K-12 |
| Modeling Physics with Glowscript 2D and 3D Simulations | Charles | Payne | 9-12, College |

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| Don’t take rocks for granite, these are gneiss samples but tuff to identify | Randy | Bechtel | K-12 |
| The Ions Song | Sharon | Beck | 9-12, College |
| “Cloze”-ing the Achievement Gap in Science and Literacy | Jess | Miller | K-5, K-8, K-12, 3-5, 6-8, 9-12, 6-12, General |
| Why is that? Science simulations that lead to understanding | Thom | OBrien | 3-5, 6-8, 9-12 |
| Developing Models through Sense Making | FOSS | Consultant | K-2, K-5, K-8 |
| The Triple E’s of Climate Change: Environmental Change, Epidemiology & ELISA Testing! | Tamica | Stubbs | 6-12, College |
| What's in Your Top Pocket? | Evalee | Parker | K-12 |
| | Learn Ed | | |
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| **11:00 am - 12:30 pm General Session** | | | |
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| **12:30 - 1:15 pm - Celebrate the Life of Fred Beyer** | | | |
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| **12:30 - 2:00 pm - Reality Check** | | | **Pre-Service Teachers** |
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| **1:15 - 2:15 pm** | | | |
| Tips for Writing Successful Grant Proposals | Pat | Shane | General |
| PhET and Fold Your Way To Understanding Basic Atomic Structure | Stephanie | Creech | 9-12 |
| Photosynthesis and Respiration: A Discovery-Based Approach | Christine | Muth | 6-8, 9-12, 6-12, College |
| Inspired by nature: exploring renewable energy solutions based on biological principles | Dana | Haine | 6-12, College |
| Computer Science in Your Classroom with Games, Simulations, and Models | Bita | Akram | 6-8 |
| Creating Virtual Field Trips with Google Earth | Scott | Grumelot | 6-8, 9-12, General |
| The Science House Presents: The LilyPad Development Board | Pamela | Gilchrist | 6-8 |
| Using Phenomena to Engage Students in Science | Brad | Fountain | K-12 |
| Revving Up For Review | Stephanie | Jacobs | 6-8 |
| Representation in Action | Mary Beth | Hes | K-5 |
| Still "Centered" on Science | Rebecca | Robison | 3-5 |
| Creating an Inquiry-Based Classroom for Student Success | Stan | Hill | K-12, General |
| Introduction to Modeling Instruction in Biology | Jennifer | Griffin | 6-8, 9-12, 6-12 |
| STEMrangers - Science Night that Mean Something | Rhys | Lutsky | 3-5, 6-8 |
| Civil Air Patrol STEM Activities for Modeling and Design | Chris | Gordon | K-12 |
| Tricked into Thinking!? | Thom | OBrien | 3-5, 6-8, 9-12 |

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| Elementary Share-a-Thon | | | Elementary |
| | Science Bits | | |
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| **2:30 - 3:30 pm** | | | |
| VR in the Planetarium and Classroom | Kenneth | Brandt | 3-5, 6-8, 9-12, College, General |
| Integrating Chromebook with Vernier Technology | Judy | Day | 3-5, 6-8, 9-12, 6-12, College, General |
| How do You Read like a Scientist? Using the Scientific Method, of Course! | Sara | Torpey | K-8 |
| | Jason | Painter | 3-5, 6-8, 9-12 |
| Strategies for Navigating the 4 Levels of Inquiry | Brad | Fountain | K-12 |
| How to activate Einstein and other unique geniuses with IEP: Individual Educational Plans | Tabelech | Shipp | K-12, 6-12, College |
| Why is that? Common Science Misconceptions You Can Easily Dispel! | Laurie | Merlo | K-12 |
| Come Alive in the Classroom for Children with Special Needs | Amy | Sparks | K-5 |
| Differentiated Instruction that will Engage Everyone in Your Classroom | Brenda | LaFayette | 6-12 |
| Elementary engineering: Ideas from the UNCG STEM Teacher Leader Collaborative | Heidi | Carlone | K-5 |
| Reading, Writing, and STEM, OH MY! | Robin | Sechrist | K-5, General |
| Car design challenge | Tom | Savage | K-12 |
| Filling the Gap | Carol | Moore | 6-8, 9-12, 6-12, College |
| Connecting Ecology Concepts Globally – Modeling How Species Coexist Within Ecosystems | Tim | Guilfoyle | 6-12 |
| DIVE-IN to Engineering - A new idea for the Maker Movement! | Rhys | Lutsky | 3-5, 6-8 |
| Stand Back Let's Make Science Fun in the K-5 Classroom | Sarah | Tharpe-Winchell | K-5 |
| | Science Bits | | |
| Middle School Share-a-Thon | | | Middle |
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| **3:45 - 4:45 pm** | | | |
| Class Management Techniques Kids Don't Want You to Know | Brenda | LaFayette | 6-12 |
| Enhancing Motivation, Confidence & Career Goals: Creating Tomorrow's Scientists | M. Gail | Jones | 6-8, 9-12, 6-12 |
| Science Teacher/STEM Teacher: What's the difference? | Rhys | Lutsky | K-12, General |
| Geniventure: Explore Genetics in Your Classroom Through Virtual Dragons | Osman | Aksit | 6-8, 9-12 |
| WeDo 2.0 and Computational Thinking | John | Garrett | K-5 |
| Our Nuclear World | Lisa | Marshall | 9-12 |
| Text-Based STEM Inquiry: A Teacher/Media Coordinator Collaborative Success | Anne | Bucci | 6-8, 9-12, 6-12 |

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| Integrating iPad with Vernier Technology | Judy | Day | 3-5, 6-8, 9-12, 6-12, College, General |
| The Science of STEM in the Classroom | Kelsey | Phillips | K-2, K-5 |
| Diving into STEM with Underwater Robots | Patrick | Curley | K-12, College |
| Great  American Eclipse of 2017 - Did you see it? What really happened? | Laurie | Merlo | K-12 |
| Future Science Educators Present Discrepant Events | Penny | Jeffrey | 6-12 |
| Graffiti in the classroom? Yes, it is OK! | Jean | Pelezo | K-8 |
| Biology Test Strategies That Count | Lori | Khan | 9-12, 6-12 |
| Break Out and Escape from Boring Review | Covey | Denton | K-8 |
| New Worlds: Integrating Engineering and Science Fiction | Jason | Carter | 6-8, 9-12 |
| The "Miracle" of the K-5 PBL | Jennifer | Caligan | K-2, K-5, K-8, 3-5 |
| A-a-achoo! Cold, Flu, or Allergy? | Blenda | Singletary | 6-12 |
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| **5:00-6:00 Awards Ceremony** | | | |
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| **6:00-7:00 Reception** | | | |
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| Friday Preliminary Schedule | | | |
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| **8:00 - 9:00 am** | | | |
| Inspiring students to see STEM as the key to their success | Tanya | Curren | K-2, K-5, K-8, K-12, 3-5, 6-8, 9-12, 6-12, College, General |
| Blending technology and hands-on experiences at the Greensboro Science Center | Martha | Regester | K-12, College, General |
| The Innovation Lab: Building a Community Makerspace | Dayson | Pasin | K-12, General |
| Differentiation through Curriculum Compacting and Digital Notebooks | Maribeth | Leonard | 6-12, General |
| LEGOS and Coding and Kids, Oh My! | Julia | Wagner | K-2, K-5, 3-5 |
| Integrating Research into the AP Biology Classroom | Kimberly | Monahan | 9-12, College |
| How an Elementary AIG Teacher Integrated STEM / STEAM Activities In the Classroom | Lisa | Burke | 3-5 |
| Meaningful and Creative Fomative Assessments | Adam | Haas | 3-5 |
| The Science House Presents: Science Olympiad | Kim | Gervase | K-12 |
| Making the GRADE: Generating Reliable Alternative Diagnostic Engaging Stategies | Molly | Barlow | 9-12 |
| What's your evidence? Scientific Argumentation | Roxane | Dupuis | K-5 |
| I-Engineering Design for Sustainable Community Solutions | Aerin | Benavides | K-12 |
| Exploring Science Snacks: Physical Science | Sara | Heredia | 6-8, 9-12 |

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| NASA Resources and Opportunities for Teachers and Students | Karen | Kingrea | K-12 |
| Using Shrinky Dinks to teach Middle and High School Sciences | Penny | Shumaker Jeffrey | 6-12 |
| NCDPI: Support and Resources for Science Education and Leadership | Donna | Kenestrick | K-12, General |
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| **8:30-4:00 K-4 Focused Science Workshop** | | | |
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| **8:30-4:00 5-8 Focused Science Workshop** | | | |
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| **9:15-10:30 General Session** | | | |
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| **10:45 - 11:45 am** | | | |
| Using Critical Competitors to Deepen Understanding in Primary Science | FOSS | Consultant | K-5 |
| Flipping for Science | Veronica | Stender | 3-5 |
| PBL: Science and 3D Printing | Andrew | Vinal | K-5, K-8, K-12, 3-5, 6-8, 9-12, College, General |
| Energizing students to learn about NC's renewable energy sources & the future | Ruthann | McComb | 6-12 |
| Reinventing the Field Trip | Willow | Alston-Socha | K-8 |
| Innovative and Creative Centers | Peter | Panico | K-12 |
| Sphero - Capturing Students Attention Through Coding | Brian | Whitson | K-2, K-5, K-8, 3-5, 6-8, General |
| Science? Oh, No! I don't do science! | Judy | Jones | K-5 |
| BrainDumps and Movement for 5th Grade Science EOG Review | Lindsay | Rice | 3-5 |
| Putting it All Together | Jessica | Croson | 9-12, 6-12 |
| “The Sharks Aren’t The Ones To Watch Out For”: How Dialogue Can Change Minds About Sharks and Foster Teaching Skills | Christine | Brown | K-12, General |
| NASCAR PBLs ≥ Beyond S=D/T | Eliza | Russell | K-12 |
| "Centered" on Science | Rebecca | Robison | K-5 |
| Bioinspired Materials | Joseph | Tracy | 6-12, College |
| Rockin' First Grade Science | Marta | Toran | K-2 |
| Earth/Environmental Share-a-Thon | | | |
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| **12:30 - 1:30 pm** | | | |

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| Blending Technology into the Elementary Science Classroom | Karen | McAvinney | K-5 |
| It Happens So Fast: Wave Communication | FOSS | Consultant | 6-8 |
| Introducing Project Learning Tree's New E-Units | Renee | Strnad | K-2, 3-5, 6-8 |
| Using ALICE programming in the science classroom | Adrienne | Evans | 6-8, 9-12, 6-12, College, General |
| #PBLclouds - using technology for inquiry in PBL | Aubrey | DiOrio | K-2 |
| Using QR Codes and Mobile Apps to get your students outdoors! | Amy | Taylor | K-12, College |
| United PLC + Positive Class Community = Growth and Success in Sciencs Classroom | Lauren | Copley | 6-8, 9-12, 6-12 |
| Embrace the Science Within | Cassandra | Williams | K-12 |
| Implementing New Technologies to Solve Global Health Problems | Shane | Westhafer | 6-12 |
| Science by Design:  PBL STEM Integration Through Content | Alisa | Wickliff | K-5 |
| EPA's Generate! game explores energy choices and environmental quality | Ruthann | McComb | 6-8, 9-12 |
| Exploring from the Ground Up in Ecosystems: Modeling Diversity and Interactions | Shannon | Pylant | 6-8 |
| Curriculum for a Crowded World | Megan | Ennes | 6-12 |
| Energy from the Sun | Kimberly | Swan | 6-12 |
| Engaging Geysers, modeling geyser eruptions in the Earth Science classroom | Tim | Martin | K-12, 6-12, College, General |
| Biology Share-a-Thon | | | |
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| **1:45 - 2:45 pm** | | | |
| Show me what you learned | Peter | Panico | K-12 |
| Teaching the Unity of Sciences | Lucy | Laffitte | 9-12, 6-12, College, General |
| The Exposome: Making Chemical Exposures Relevant to Biology Instruction | Dana | Haine | 9-12, College |
| Using Biocubes to Explore a Sample of the World | Ted | Miracle | K-5 |
| "Why Do I Have to Learn This?"  Connecting Science Topics to Sports | Yvette | Medina | 3-5, 6-8 |
| Energy in Ecosystems: Project Learning Tree's New E-Unit for Grade 3-5 | Renee | Strnad | 3-5 |
| Interactive Simulations That Extend the Classroom Walls | Richard | Smith | 3-5, 6-8, 9-12 |
| Leading The Way In Science Education | Michelle | Ellis | General |
| Yorel Lofters, M.Ed. | Yorel | Lofters | K-5, 3-5 |
| Strategies for Making Science Reviews and Assessments More Productive | Iris | Mudd | 6-8, 9-12, 6-12, College, General |
| Camp Focus: Enhancing STEM Education Through Informal Learning | Jennifer | Stalls | 6-8 |
| Pendulum Paintings!  Forces of Motion Hands On Activity | Amy | Taylor | K-8 |
| What's Snot To Like?: Explore the Respiratory and Immune Systems Through Mucus | Daniel | Wheeler | 6-8 |
| Teaching and Learning through Exploration and Discovery | James | Martin | 9-12, 6-12, College, General |
| Physical Science/Chemistry/Physics Share-a-Thon | | | |
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| 3:00 - 4:00 pm | | | |
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| Classroom Misbehavior is Ingenioius - For the Wrong Reasons | Peter | Vajda | K-12 |
| Re-Imagining the Grid: Hands-on and Practical Ideas for Teaching Energy and the Grid in the Classroom | Samantha | Lawing | 6-8, 9-12 |
| Carbon & Climate: Project Learning Tree's New E-Unit for Grade 6-8 | Renee | Strnad | 6-8 |
| Wait, learning can be fun? | Alicia | Baldwin | K-2, K-5, 3-5 |
| SciencELA: Novels in Science | Elisabeth (Betty Jo) | Moore | 6-8, 6-12 |
| Best Practices for Student Achievement and Engagement in Biology | Erica | Sypole | 9-12 |
| Science and the Korean War | Kathy | Bosiak | 6-8, 9-12, 6-12 |
| Teaching Science by Addressing Different Learning Styles | Susan | Nazario | 3-5, 6-8 |
| Begin With the End in Mind: Deconstructing the 5th grade EOG | Cynthia | Dey | 3-5 |
| Passports to Smooth Sailing Through Assessments | Jean | Stowell | 6-8, General |
| Problem Based, Project Based, Hands On = Differentiation | Mark | Case | 6-12 |
| How to Prepare for the Middle Grades Science edTPA | Cheryl | Horton | 6-8 |
| Implementing Design Challenge Approaches for K-5 Science | Wayne | Shore | K-5 |
| SWEET! Potatoes | Ted | Miracle | 3-5 |
| The Science of Design: Modeling Atomic Theory Over Time | Stephen | Roman | 9-12, College |