

	10:30-11:00 a.m.	11:15-11:45 a.m.	12:00-12:30 p.m.	12:45-1:15 p.m.	1:30-2:00 p.m.	3:00-3:30 p.m.	3:45-4:15 p.m.	4:30-5:00 p.m.
ARCHIVES		Applying New Research to Increase Success in Math Before Calculus Gary Rockswold <i>Minnesota State University, Mankato</i> Terry Krieger <i>Rochester Technical and Community College</i>	Extending Pathways: Using Pathways to Bridge to College Mathematics Before Calculus Kathleen Almy and Heather Foes <i>Rock Valley College</i>	Geometric Conjectures in Dynamic Geometry Environments Before Calculus Arsalan Wares <i>Valdosta State University</i>	Corequisite as a 3-hour Course Before Calculus Anne Fischer <i>Tulsa Community College</i>	A Win-Win Assessment Strategy Before Calculus Wael AbuShammala <i>San Jacinto College</i>	20 Years Later, Interactive Online Mathematics Before Calculus Joan Kessler <i>Broward College</i>	A Co-Requisite Pilot - Year Two. How's It Going? Pedagogy Randy Gallaher & Kevin Bodden <i>Lewis & Clark Community College</i>
MONUMENT	"Learning Catalytics™: An Effective Technology Tool to Promote Student Engagement and Interaction" MyLab Math Adam Chekour <i>University of Cincinnati - Blue Ash</i>	Flipping (any) Mathematics Class Using Instructor Created Questions in MyLab™ Math MyLab Math Terry Barron <i>Georgia Gwinnett College</i> Peggy Slavik <i>Baldwin Wallace University</i>	Using Custom "Common Errors" MyLab Math Questions for "High Risk" Calculus Students MyLab Math Robert Strozak <i>Old Dominion University</i>	Online Tools for Assignments in Hybrid Courses: To Use or Not to Use MyLab Math Rodica Cazacu <i>Georgia College</i>	Effective Use of MyLab™ Math (MyLabsPlus™) for Positive Long-term Effects MyLab Math Rachid Ait Maalem Lahcen, Alina Stefanov, and Ram Mohapatra <i>University of Central Florida</i>	What Can Direct Digital Access and MyLabsPlus™ Do for You? MyLab Math Melissa Reid, Terri McKnight, and Leanne Dixon <i>Rowan-Cabarrus Community College</i>	Teaching Finite Mathematics Online - A Course Coordinator's Perspective MyLab Math Jacob Dasinger <i>University of South Alabama</i>	Using MyLab™ Math to Reduce Math Anxiety MyLab Math Betty Barbari <i>SUNY College at Old Westbury</i>
SALON A	Investing the Pedagogy of R Versus Minitab® in Teaching Statistics Statistics Reza Abbasian and John Sieben <i>Texas Lutheran University</i>	Statistics: What's Hot and What's Not? Statistics Marty Triola <i>Dutchess Community College</i>	Engaging Statistics Projects Using StatCrunch™ and Excel Statistics Wendy Pogoda <i>Hillsborough Community College</i>	Using Technology to Foster Students' Conceptual Understanding of Confidence Intervals Statistics Melanie Autin <i>Western Kentucky University</i>	Using Simulation to Enhance Statistical Concepts Statistics Michael Sullivan III <i>Joliet Junior College</i>	Statistics and the Media Statistics Maureen Petkewich and Gail Ward-Besser <i>University of South Carolina</i>	Introductory Statistics in the Cloud via Web Apps Statistics Bernhard Klingenberg <i>Williams College</i>	
SALON B	Motivating College Algebra Students Using Internet Data Before Calculus Cathleen Zucco-Teveloff <i>Rider University</i>		Digitally Enriched Math Lessons Before Calculus Ugur Mert <i>Ted Istanbul College</i>	Mastery-based, Modular Learning for Developmental Mathematics: A Fingerprint on Learning Before Calculus Lee Ann Roberts, Alvina Atkinson, and Sarah Park <i>Georgia Gwinnett College</i>	Common Cents - Using Low Cost Materials in Your Classroom Before Calculus Glenn Newman <i>Embry Riddle Aeronautical University</i>	Bootcamps & Corequisites: Moving Students Through Their Math Sequence Faster Before Calculus Jamie Blair <i>Orange Coast College</i> Anne Fischer <i>Tulsa Community College</i>	Flipping the Hybrid College Algebra Classroom using MyLab™ Math Before Calculus Violeta Vasilevska <i>Utah Valley University</i>	Expected Value When It Really Matters.... Monopoly Before Calculus Alicia Collins <i>Mesa Community College</i>
SALON C	Spreadsheets for Quantitative Reasoning: An Excel-lent Way to Engage Your Students with Mathematics Quantitative Reasoning Eric Gaze <i>Bowdoin College</i>	Mathematics in Action: Projects for Engaging Quantitative Reasoning Students Quantitative Reasoning Alvina Atkinson, LeeAnn Roberts, and Sarah Park <i>Georgia Gwinnett College</i>	Ensuring Transfer of Quantitative Reasoning and Gen Ed Math Courses Quantitative Reasoning Connie Richardson <i>Charles A. Dana Center</i>	STEM Sharon Sledge <i>San Jacinto College</i>	Do You Kahoot!™? STEM Carla Hill <i>Marist College</i>	Pathways to Understanding: Dynamic Mathematics Technology as Driver STEM Wade Ellis <i>West Valley College</i> Thomas Dick <i>Oregon State University</i> William Bauldry <i>Appalachian State University</i>	Prepare Tomorrow's Students Today by Creatively Integrating Pedagogy, STEM, and Globalization STEM Tom Reardon <i>Youngstown State University</i>	Visualizing Mathematics with Graphs & Computations without The Learning Curve Before Calculus Ana Gowribalan Vamadeva <i>University of Cincinnati - Blue Ash College</i>
SALON G	Creating User-friendly Problems Calculus Mary Jane Sterling <i>Bradley University</i>	Mathematical Modeling: Creating a Video Game Beyond Calculus Paul Bouthellier <i>University of Pittsburgh-Titusville</i>	Using Geogebra as a Theoretical Framework for Learning Quadric Surfaces Calculus Mohammad Ganjizadeh <i>Tarrant County College</i>	Don't Be Afraid of the F-word: Flipping is Better Calculus Darin Kapanje <i>Temple University</i>	Who Says You Can't Do Calculus in Excel? Calculus Michael Seminelli and Andrew Plucker <i>United States Military Academy</i>	Tools of Modern Mathematics: An Introduction to Experimental Mathematics Beyond Calculus Debra Hydorn <i>University of Mary Washington</i>	Using 3D Drawing and Technology to Conceptually Understand Volumes of Revolution in Calculus Calculus John King <i>Perimeter College at Georgia State University</i>	IguanaTex: LaTeX Add-in for PowerPoint™ Greatly Simplifies Creating Mathematical Slides Calculus David Schweitzer <i>Liberty University</i>
SALON H	Engaging Students by Using Learning Catalytics™ Pedagogy Lazara Ferrer and Marta Brito-Villani <i>Miami Dade College</i>	Online Examination for Online Courses - Reduce Student Dishonesty Teaching Math Online Oscar Macedo, Alexandra Macedo, and Gabriel Mendoza <i>El Paso Community College</i>	Math in an Instant Feedback World 2.0 Pedagogy Jessica Bernards and Wendy Fresh <i>Portland Community College</i>	Using the Emporium Model to Improve Student Performance Research Kathy Cousins-Cooper and Katrina Nelson <i>North Carolina A&T State University</i>	Multimedia Design Principles of Animations: An Example for Piecewise Functions Research Alicia Serfaty de Markus <i>Miami Dade College</i>	Online Versus Face-to-Face Teaching Math Online Jing Chang <i>College of Saint Mary</i>	Engaging Statistics Students with Clickers Statistics Gabi Booth <i>Daytona State College</i>	
SALON N	Preparing New Faculty to Serve Effectively in Your Department Real World Applications John Bacon, David Harness and Michael Yanokovich <i>United States Military Academy</i>	Z(app) the Tedium: Apps and Applications for Liberal Arts Students Real-World Applications Tom Pirnot <i>Kutztown University</i>	Global Numeracy, Global Change Real-World Applications Kurt Kreith <i>University of California at Davis</i>	Using Shiny from RStudio to Teach, Motivate, and Evaluate a Classroom Created Social Network Real-World Applications Bryan Adams <i>United States Military Academy</i>	Mathematics, Science, and Reality Real-World Applications Gary Rockswold <i>Minnesota State University, Mankato</i>	Solar Energy and Trigonometry Real-World Applications James Cliber <i>Iowa State University</i>	OK, Take Out Your Cell Phones Real-World Applications Lasse Savola <i>SUNY - Fashion Institute of Technology</i>	
SALON O	Document Camera Fun Pedagogy Tom Carson <i>Franklin Classical School</i>	Cell Phones on a Test? I Say Yes Pedagogy Denise Nunley <i>Scottsdale Community College</i>	A College Algebra Corequisite Pilot at the University of Idaho Pedagogy Kirk Trigsted <i>University of Idaho</i>	Have Your "Pi" and Eat It "Two": Integrating College Functions Pedagogy Phoebe Rouse <i>Louisiana State University</i>	Blended Learning with OER Platforms in Undergraduate Mathematics Pedagogy Minsu Kim <i>University of North Georgia</i>	Flipping Your Classroom with MyLab™ Math and Interactive Statistics Pedagogy George Woodbury <i>College of the Sequoias</i>	Interactive Corequisites in College Algebra Pedagogy Kevin Bodden and Randy Gallaher <i>Lewis and Clark Community College</i>	Tips for Managing Discussion Forums in Online Math Courses Pedagogy Kelly Weems <i>Georgia Military College</i>

MINI-COURSES Friday, March 16
DON'T MISS: Keynote Address 8:30 a.m.

	9:30-11:15 a.m.	11:30 a.m.-1:15 p.m.	1:30-3:15 p.m.	3:30-5:15 p.m.
CAPITOL	An Introduction to GeoGebra and Dynamic Worksheets David Ray, <i>University of Tennessee at Martin</i>	Camtasia®: Creating SCORM Content Packages Sarah Mabrouk <i>Framingham State University</i>	Desmos and Geogebra: Teaching Calculus Conceptually Michael McConnell and Marcella McConnell <i>Clarion University</i>	Linear Algebra Activities: Simplest to Most Difficult Concepts Using GeoGebra James Factor and Susan Pustejovsky <i>Alverno College</i>
CONGRESS	Creating Interactive Learning Experiences for Any Course Format Michael Sullivan <i>Joliet Junior College</i> George Woodbury <i>College of Sequoias</i>	Welcome to Mathematica® Jason Gregersen <i>Michigan Technological University</i>	Show Me the Data - Getting Started with StatCrunch™ Sharleen McCarroll <i>American River College</i>	Desmos: A Free Online Graphing Tool for Developing Classroom Activities Katie Pridemore <i>Valencia College</i>
MINT	iPad® Notability Mini-Course Jay Sharritt, Matthew Mogensen, and Michael Seminelli <i>United States Military Academy</i>	Assessment: From a Silent Killer of Learning to an Active Booster of Better Learning Kristin Arney, Kayla Blyman, Lisa Bromberg, David Delcuadro-Zimmerman, David Harness, Scott Warnke, Frank Wattenberg, and Sarah Wolberg <i>United States Military Academy</i>	Versatile Solutions to Develop Online Videos Julia Ledet and Michaela Stone <i>Louisiana State University</i> Kothari Arslan <i>Normandale Community College</i>	Get Down and Dirty with Doceri...and Amaze Your Students with Your Responses! John Diamantopoulos <i>Northeastern State University</i>

MINI-COURSES Saturday, March 17

	9:00-10:30 a.m.	10:45 a.m.-12:15 p.m.	12:45-2:15 p.m.	2:30-4:00 p.m.
CAPITOL	3D Printing in Calculus with Mathematica® Jason Gregersen <i>Michigan Technological University</i>	Spreadsheets for Quantitative Reasoning: An Excel-lent Way to Engage Your Students with Mathematics Eric Gaze <i>Bowdoin College</i>	Camtasia®: An Introduction Sarah Mabrouk <i>Framingham State University</i>	Visualizing Multivariable Calculus & Differential Equations Using CalcPlot3D™ Paul Seeburger <i>Monroe Community College</i>
CONGRESS	Lights, Camera, Action! Recording and Editing Videos in Camtasia® 9 Rose Jenkins <i>Midlands Technical College</i>	Using EDpuzzle to Flip a Class Debra Pharo <i>Northwestern Michigan College</i>	Creating Mathematics Tutorials for Online Courses Using an iPad Pro®, Reflector 2®, and Camtasia Studio® Cathy Frey <i>Norwich University</i>	
MINT	Introduction to Visualizing Mathematics: GeoGebra and Desmos Mike May <i>Saint Louis University</i>	Math With an Assist: Coding in Grades 2-12 Jerome Caldwell <i>University of Wisconsin, River Falls</i>	All-Time Mathematically Rich Geometry Through Precalculus Activities, Individualized with Solutions Tom Reardon <i>Youngstown State University</i>	The Use of Maple™ Software in a Calculus Course Matthew Westerhoff <i>Northern Virginia Community College</i>
TREASURY	Jazz Up Your Presentation with Learning Catalytics™ Maria Alvarez, Lourdes Espana, and Victoria Livinski <i>Miami Dade College</i>	Show Your Work: Explicating Students' Thinking Using Online Assessment Tools Caree Pinder and Ruthmae Sears <i>University of South Florida</i>	Update Your Online STATus Maureen Petkewich <i>University of South Carolina</i>	

	9:00-9:30 a.m.	9:45-10:15 a.m.	10:30-11:00 a.m.	11:15-11:45 a.m.	12:45-1:15 p.m.	1:30-2:00 p.m.	2:15-2:45 p.m.	3:00-3:30 p.m.	3:45-4:15 p.m.
ARCHIVES	The Importance of Adopting Evolving Technological Tools to Expand Content Knowledge to 3D Calculus Wei-Chi Yang <i>Radford University</i>	The Turing Bombe and its Role in Breaking Enigma Beyond Calculus Neil Sigmon <i>Radford University</i>	Exploring Calculus with Mathematica Calculus Somaya Muiny <i>Georgia State University</i>	3D Printing: Making It Real Calculus Nora Strasser <i>Friend University</i>	"Where Am I Going to Use That?" Before Calculus Rusandica Manole <i>Georgia State University</i> <i>Perimeter College</i>				
SALON A	Free Online Tools for Teaching Introductory Statistics Statistics Paul Velleman <i>Cornell University</i>	Students Analyzing Real Polling Data: Enhancing Your Statistics Course Statistics Jason Gershman <i>Nova Southeastern University</i>	Statistical Investigations: You Might Already Be Teaching Data Science Statistics Robert Gould <i>University of California Los Angeles</i>	How Twitter, Pocket, and Padlet Changed My Statistics Course Statistics Rebecca Wong <i>West Valley College</i>	The Mathematics of Video Poker Statistics Paul Bouthellier <i>University of Pittsburgh-Titusville</i>	Simulations: From Playing Cards to StatCrunch™ and Beyond Statistics Carrie Grant <i>Flagler College</i>	Interactive Tools for learning R and Python: Preparation for Statistics Projects Statistics Marsha Davis, Garrett Dancik, and Roland DePratti <i>Eastern Connecticut State University</i>	New Approach to Statistics by Using Learning Objective Statistics Wendiann Sethi <i>Seton Hall University</i>	Creating Shiny Apps for in Class Activities Statistics Ryne VanKrevelen and Laura Taylor <i>Elon University</i>
SALON B	Pre-statistics: Acceleration and New Hope for Non-STEM Majors Before Calculus Jay Lehmann <i>College of San Mateo</i>	The Hybrid Classroom: Best of Both Worlds Before Calculus Gabi Booth and Ethan Repyneck <i>Daytona State College</i>	Using Technology to Motivate Students and Support Learning Strategies in Online College Algebra Before Calculus Frances Hopf and Ruthmae Sears <i>University of South Florida</i> Casey Williams <i>Hillsborough Community College</i>	Using Original Software to Enhance Teaching in Math for Business and Social Sciences Before Calculus Timor Sever <i>Houston Community College</i>	Volumetric Measurement of Tumors: Mathematical Models, Assumptions, and Errors Before Calculus Scott Sinex and Ted Chambers <i>Prince George's Community College</i>	Nontrivial Motivational Case Studies for College Introductory Courses in Mathematics Before Calculus Vladimir Riabov <i>Rivier University</i>	Using Open Educational Resources in Precalculus Before Calculus Robert Strozak <i>Old Dominion University</i>		Integrate Various Technologies to Enhance Student Learning Using Best Practices Before Calculus Mickey Nakagome <i>Maricopa Community Colleges</i>
SALON C	Using Instructor Created Videos to Teach Mathematics in Elementary School MathEd/TeacherPrep Thomas Klein <i>Marshall University</i>	Technology Usage to Promote Mathematical Thinkers MathEd/TeacherPrep Marcella McConnell <i>Clarion University</i>	Service Learning in an Online Math Course MathEd/TeacherPrep Kimberly Bennekin <i>Perimeter College at Georgia State University</i>	Using Geometer's Sketchpad® to Teach Geometric Thinking MathEd/TeacherPrep Shafia Abdulrahman <i>Emirates College for Advanced Education</i> Lilla Adulyasas <i>Yala Rajbahat University</i>	"Show Me" - An Interactive Email Response MathEd/TeacherPrep Becky Moening <i>Ivy Tech Community College</i>	Transform Your Students' Thinking about Geometry MathEd/TeacherPrep Nikita Patterson <i>Georgia State University</i>	The Development of Technological, Pedagogical, and School Mathematics MathEd/TeacherPrep Reda Abu Elwan <i>Sultan Qaboos University</i>		
SALON G	Elliptic Integrals and Some Applications Beyond Calculus Jay Villanueva <i>Florida Memorial University</i>	3D Printing Lessons in Multivariable Calculus Calculus Kristen Schreck <i>Saint Xavier University</i>	Calculus with Interactive Figures Calculus Eric Schulz <i>Walla Walla Community College</i>	Linear Algebra: Simplest to Most Difficult Concepts using GeoGebra Beyond Calculus James Factor <i>Alverno College</i>	A Team Based Collaboration Model Using MURAL Calculus John Ehrke <i>Abilene Christian University</i>	Creating Video Tutorials for Pearson's Interactive Figures - Lessons Learned Calculus Marc Renault <i>Shippensburg University</i>	Departmental Final Exams - Experiments, Failures, and Successes Calculus Mozhgan Mirani <i>Tennessee State University</i>	Know Your Customer: Driving Course Design Through Student Data Calculus Andrew Plucker and Michael Seminelli <i>United States Military Academy</i>	Using Mathematica in the Teaching of Calculus-Based Probability Calculus Jeff Clark <i>Elon University</i>
SALON H	Software and Resource Considerations for Teaching Online and Hybrid Courses Pedagogy Sarah Mabrouk <i>Framingham State University</i>	The Funny Thing About Math...Volume II Pedagogy Terry Krieger <i>Rochester Community and Technical College</i>	To Compute or Not to Compute, That is The Question Statistics Keisha Brown <i>Perimeter College at Georgia State University</i>	Statistics Activities: Utilizing the Features of StatCrunch™ Statistics Peggy Slavik <i>Baldwin Wallace University</i> Terry Barron <i>Georgia Gwinnett College</i>	Undergraduate Research Seminar in Applied Mathematics - A Success Story Pedagogy Kuppalapalle Vajravelu <i>University of Central Florida</i>	Placement Testing for Calculus Pedagogy Robert Banik <i>Mississippi State University</i>	Designing Successful Corequisite Programs: Structures, Content, and Pedagogy Pedagogy Markus Pomper <i>Roane State Community College</i> Connie Richardson <i>Charles A. Dana Center</i>	Communicating Math So It Matters Real-World Applications Heather Seminelli <i>United States Military Academy</i>	
SALON N	Modeling Important Social Issues with Data: Opioid Overdose Deaths Real-World Applications Tom Reardon <i>Youngstown State University</i>	World Population, Demographics, Equity, and Murder Real-World Applications G Donald Allen <i>Texas A&M University</i>	Using Technology to Facilitate the Implementation of Problem Based Learning in Calculus Real-World Applications Rabia Shahbaz, Priya Boindala, and Nathasha Brewly <i>Georgia Gwinnett College</i>	Transforming Assessment from a Silent Killer of Learning to an Active Booster Real-World Applications Kristin Arney and Frank Wattenberg <i>United States Military Academy</i>	Engaging Exams, Evaluating Evaluations: An Alternate Approach Assessed Real-World Applications Kayla Blyman and David Delcuadro-Zimmerman <i>United States Military Academy</i>	Alternative Assessments: The Good, The Bad, the Ugly, and What to Do in the Future Real-World Applications David Harness and Scott Warnke <i>United States Military Academy</i>	Interdisciplinary, Video Games, Power Creep, Liberal Arts, Math, and History Real-World Applications Jordan Slavik <i>University of Maryland</i>	Teaching Functions by Collecting Data with Vernier Sensors Real-World Applications Suzanne Sumner <i>University of Mary Washington</i>	How (NOT) to Make and Grade Discovery-Learning Assessments Real-World Applications Kristin Arney, Lisa Bromberg and Sarah Wohlberg <i>United States Military Academy</i>
SALON O	Improving Learning Outcomes with Math Based Courseware Technology Pedagogy Andrew Rourke <i>Maplesoft</i>	Readiness Programs: Preparing Students for College in High School Pedagogy John Squires <i>Southern Regional Education Board</i>	Measuring What Matters: Quantifying Returns on Digital Math Programs Research Lou Pugliese <i>Arizona State University</i>	Using Interactive Songs to Increase Student Engagement and Learn Statistics Research John Weber <i>Perimeter College at Georgia State University</i>	Creating Accessible Online Mathematics Lessons for Blind Students Pedagogy Scott Randy <i>The University of Akron</i>	Interactive Applets with Shiny from RStudio® Pedagogy Matthew Mogensen <i>United States Military Academy</i>	GeoGebra, Photography, and Picture Books: A Means to End Math Anxiety Pedagogy Joseph Furner <i>Florida Atlantic University</i>	CALL for an Alternative to Corequisite Models Pedagogy Kim Walters <i>Mississippi State University</i>	Using Office Mix™ for Success in Online Courses Pedagogy William Tschume <i>Mississippi State University</i>