DON'T MISS: Keynote Address 8:00 a.m.

Pearson

	9:30-10:00 a.m.	10:15-10:45 a.m.	11:00-11:30 a.m.	12:30-1:00 p.m.	1:15-1:45 p.m.	2:00-2:30 p.m.	3:00-3:30 p.m.	3:45-4:15 p.m.
KIERLAND 1A	♟ **Math Education/ Teacher Prep** — Modeling in the Curriculum from 5th Grade Through Differential Equations; Patrice Tiffany & Rosemary Farley; *Manhattan College* ★	● **Beyond Calculus** — The Importance of Modeling in Calculus and Differential Equations Courses; Rosemary Farley & Patrice Tiffany; *Manhattan College* ★	● **Calculus** — Making Calculus Relevant; Sharon Sledge; *San Jacinto College* ★	■ **Real World Applications** — Z(app) the Tedium: Apps and Applications for Liberal Arts Students; Thomas Pirnot; *Kutztown University*	● **Calculus** — A Simpson Surprise; Eric Schulz; *Walla Walla Community College*	◆ **Pedagogy, Assessment & Research** — Assessment for Online Statistics with or without Proctoring; Rodica Cazacu & George Cazacu; *Georgia College*	Problem-Based Learning to Enhance Students' Achievement; Lazara Ferrer & Marta Brito-Villani; *Miami Dade College*	● **Calculus** — Exploring Calculus with Mathematica; Somaya Muiny; *Georgia State University*
KIERLAND 1B	⬠ **Before Calculus** — A Classroom Model for Increasing Learning and Success in Liberal Arts Math; Scott Demsky; *Broward College*	College Algebra Early Intervention: Success for Some - Failure for Others; Phoebe Rouse, Debra Kopcso & Stephanie Kurtz; *Louisiana State University* ★	Using Geometer's Sketchpad to Solve Challenging Problems; Mary Jane Sterling; *Bradley University*	Geometry Explorations - Discovery At Your Fingertips with Classpad.net; Karen Greenhaus; *Drexel University*	Answering Questions with Educreations Outside the Classroom; Pamela Webster; *Texas A&M Commerce*	Linear Programming: Using Original Software To Enhance Teaching; Timor Sever; *Houston Community College*	Using Excel with Internet Data in an Introduction Quantitative Methods Business Course; Cathleen Zucco-Teveloff; *Rider University*	Flex Your Learning with Mastery Based Algebra; Alison Bonner; *Pennsylvania State University*
KIERLAND 1C		● **Calculus** — NEW SESSION: Flipping Calculus - An Integrated Approach; Darin Kapanjie; *Temple University*	Fostering Classroom Interaction in Calculus Using Student Response Technology; Przemyslaw Bogacki; *Old Dominion University* ★	Using Technology to Increase Student Engagement in Online Calculus Courses; Laurie Woodman; *University of Southern Maine*	● **Beyond Calculus** — Discrete Math Resources for Continuous Learning; Andrew Beiderman; *Community College of Baltimore County*	● **Calculus** — Keeping in Summer Shape (KiSS) in Calculus; Carla VanDeSande & Kayla Lock; *Arizona State University*	● **Beyond Calculus** — Presenting a Comprehensive Library of GeoGebra Applets for Linear Algebra; James Factor; *Alverno College*	Number Theory + Python = a Perfect Partnering; Irina Shablinsky; *Purchase College, SUNY*
KIERLAND 4A	✦ **Corequisite** — Flipping the Corequisite Statistics Course; Michael Sullivan; *Joliet Junior College*	Strategies to Improve Success for Online Math Students; Fitzroy Farquharson; *Valenica College*		✦ **Corequisite** — Corequisite Implementation – Bootcamps or Semester Courses?; Anne Fischer, *Tulsa Community College*; Jamie Blair, *Orange Coast College*	CALL for a Coreq; Kimberly Walters; *Mississippi State University*	Accelerated Math Sequences: Methodology and Techniques for Coreqs & Math Jams; Jennifer Crawford, *Normandale Community College*; Jamie Blair, *Orange Coast College*; Anne Fischer, *Tulsa Community College*	Incorporating Mindsets into Corequisite Support Courses; George Woodbury; *College of the Sequoias*	A Corequisite Pilot – First Semester Results; Salvador Vera; *Northern Arizona University*
KIERLAND 4B	▲ **Statistics** — Perfect Examples in Statistics; Marty Triola; *Dutchess Community College*	Random Number Generators, Simulations, and the Central Limit Theorem; Paul Bouthellier; *University of Pittsburgh, Titusville*	Apps in Intro Stat: Where, When and Why; Bernhard Klingenberg; *Williams College*	Using Technology to Foster Students' Conceptual Understanding of Correlation; Melanie Autin, *Western Kentucky University*; Laura Taylor, *Elon University*	◆ **Pedagogy, Assessment & Research** — A New Approach to the Flipped Classroom; Wendy Fresh & Jessica Bernards; *Portland Community College*	▲ **Statistics** — A Final Project Design: Three Phases for Success; Carrie Grant; *Flagler College*		▲ **Statistics** — Teaching Data Visualization with Power BI; Maureen Petkewich; *University of South Carolina, Darla Moore School of Business*
KIERLAND 4C	✦ **MyLab Math & Statistics** — Why Would I Ever Want to Use the Custom Question Builder?; Gwen Terwilliger; *University of Toledo*	Jazz Up Your e-Statistics Poster Board with StatCrunch; Lourdes Espana & Maria Alvarez; *Miami Dade College*	Personalizing MyLab Math to Improve Students' Success; Rachid Ait Maalem Lahcen & Ram Mohapatra; *University of Central Florida*	The Publishing World Is NOT Flat; Nathan Ritchey; *Kent State University*	ADA and Your MyLab Math & Statistics Course; Diane Hollister & Greta Swanson; *Pearson*	Results of Digital Courseware Project Using Learning Catalytics and Technology; Eric Samansky & Jason Gershman; *Nova Southeastern University*	Coordinator Courses in MyLab Math; William Tschume; *Mississippi State University*	Using Machine Learning to Get More Out of MyLab Math Data; Aaron Smith; *Seminole County Public School*
TRAILBLAZER E	◆ **Pedagogy, Assessment & Research** — Document Camera Fun!; Thomas Carson; *Franklin Classical School*	Diving Deeper: Does "Success" Mean All Are Succeeding?; Brian Beaudrie & Barbara Boschmans; *Northern Arizona University*	Trying the Trends: Flipped, Hybrid, Online, Video, Clickers, and More; Brian Rickard; *University of Arkansas*	How Technology Can Help Develop Student Writing Skills; Jeffrey Clark; *Elon University*	Learning Assistants in Blended Classrooms - Peer Learning On-site and Online; Margaret Moore; *University of Southern Maine*	The Role of Technology in Inverted Versus Traditional Instruction; Reza Abbasian & John Sieben; *Texas Lutheran University*	The Future Is High Tech - but Success May Be Low Tech; Amy Bell; *Central Carolina Technical College*	Cultivating Technologically Guided Culturally Relevant Mathematics; Bathi Kasturiarachi; *Kent State University, Stark*

Legend: ⬠ Before Calculus ● Beyond Calculus ● Calculus ✦ Corequisite ★ Fellow ♟ Math Education / Teacher Prep ◆ MyLab Math & Statistics ◆ Pedagogy, Assessment & Research ■ Real World Applications ▲ Statistics

	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.
TRAILBLAZER C		✦ Corequisite — **FEATURED SESSION: A Corequisite College Algebra Course** — Michael Sullivan, *Joliet Junior College* | Jessica Bernards & Wendy Fresh, *Portland Community College*							
KIERLAND 1A *(⬠ Before Calculus)*	**Is It Magic? No, It's Mathematics** — Terry Krieger — *Rochester Community and Technical College*	**Spreadsheets for Quantitative Reasoning: An Excel-lent Way to Engage Your Students with Mathematics** — Eric Gaze — *Bowdoin College*	**Quantitative Literacy for the Masses!** — Rachael Lund — *Michigan State University*	**Sequences, Discrete Functions, and Series Using Technology in College Algebra** — Lisa Yocco — *East Georgia State College*	**Assessing the Impact of the Emporium Model on Student Performance** — Kathy Cousins-Cooper, Dominic Clemence, Nicholas Luke, Seongtae Kim & Katrina Nelson — *North Carolina A&T State University*	**Trials and Triumphs at the MALL (Math Active Learning Lab)** — Michele Iiams, Tim Prescott & Gwennie Byron — *University of North Dakota*	**Inject Some Life into Your Classroom with Technology and Humor** — Kory Swart — *Kirkwood Community College*	**Animation and Simulation for Mathematics Courses** — Richard Herbst — *Montgomery County Community College*	**An Alternative Method for Solving Rational Inequalities** — Timor Sever — *Houston Community College*
KIERLAND 1B	*Calculus* — **A Continuing Look into Calculus Placement** — Robert Baník — *Mississippi State University*	*● Beyond Calculus* — **Designing a 3D Video Game with P5.js** — Paul Bouthellier — *University of Pittsburgh, Titusville*	*Calculus* — **Graphing Polar Curves Using Excel** — Nadeem Aslam — *Florida International University*	**Creating Interactive Documents for Mathematics Education** — Daniel Skoog — *Maplesoft*	*● Beyond Calculus* — **A Catapult Course in OpenScad for 3D printing** — Knarik Tunyan — *Purchase College, SUNY*	*◆ Pedagogy, Assessment & Research* — **Assessing Modeling Meaningfully in a Freshman-Level Mathematical Modeling Course through Discovery Learning Assessments** — David Del Cuadro-Zimmerman — *United States Military Academy, West Point*	*● Beyond Calculus* — **Evolution of Solitons via Excel** — Jay Villanueva — *Florida Memorial University*	*Calculus* — **Is Bread the Most Efficient Shape?** — Dwight Horan — *Wentworth Institute of Technology*	**Multivariable Calculus Visualizations in GeoGebra and Virtual Reality** — Piotr Runge — *Utah State University*
KIERLAND 1C *(⬛ Math Education / Teacher Prep)*	**Service Learning in a Mathematics Education Course** — Nikita Patterson & Kimberly Bennekin — *Georgia State University, Perimeter College*	**GAISE-based Statistics for the Elementary Teacher - Comparison of Students' Learning in Online and Face-to-Face Classes** — Cynthia Stenger — *University of North Alabama*		**Math and Reading Goes Hand-in-Hand** — Shannon Solis & Tonia Garrett — *San Jacinto College*	**Game Technology for the Active Learning Classroom** — Frank Ives, *University of La Verne*	**Enhancing the Geometry Classroom with GeoGebra Projects** — Violeta Vasilevska — *Utah Valley University*	**Improving Preservice Teachers' Noticing Expertise Through Technology-Integrated Mathematics Content Courses** — Mi Yeon Lee — *Arizona State University*	**Fostering Imagination and Creativity with GeoGebra in Mathematics Teacher Education** — Dr. Joseph Furner — *Florida Atlantic University*	
KIERLAND 4A *(◆ Pedagogy, Assessment & Research)*	**The Pros and Cons of the Flipped Model Classroom Using IBL** — Caroline Caswell — *Rhode Island College* — Gail St. Jacques — *Johnson & Wales University*	**Cognitive Ease and STEM Courses … Are we Helping Too Much?** — Jill Whealon — *University of Maryland, University College*		**Supporting Students Online Through Web Conferencing** — Christina Holdiness — *University of California, Riverside*	**Using PowerPoint to Create Videos for Teaching Mathematics** — Thomas Klein — *Marshall University*	**Making Calculus Videos and Incorporating Them into Calculus Courses** — Debra Carney — *Colorado School of Mines*	**Designing an Effective Mathematics Placement Test** — Jacob Dasinger — *University of South Alabama*	**Socrative App for Active Student Responses** — Vicki Ingalls — *Tiffin University*	**Integrating Parallel Notes Delivery and Study Sets** — Rachid Ait Maalem Lahcen & Ram Mohapatra — *University of Central Florida*
KIERLAND 4B *(■ Real World Applications)*	**Using Real World Data Means Math Solves Real World Problems** — Jason Gregersen — *Michigan Technological University*	**Changing Assessment from Silent Killers of Learning to Vibrant Learning Experiences with Examples** — Kristin Arney & Frank Wattenberg — *United States Military Academy, West Point* ★	**Engaging Students by Using Math and Stats to Inform Controversial Public Policy Decisions with Examples** — Kristin Arney & Frank Wattenberg — *United States Military Academy, West Point* ★	**Opioid Addition: Modeling the Opioid Epidemic in the United States** — Kayla Blyman — *United States Military Academy, West Point*	**Turtle Power: Longitudinal Modeling Project in the Undergraduate Classroom** — Kayla Blyman — *United States Military Academy, West Point*	**Using Parking Lot Data Collection to Study Climate Science and Hot Cars in Introductory Math and Stats** — Scott Lynch & Kayla Blyman — *United States Military Academy, West Point*	**Modeling with Student Centered Data in a Calculus Classroom** — Scott Warnke & Kristin Arney — *United States Military Academy, West Point*	**Understanding Differences Between American and Mediterranean Diets** — Azar Raiszadeh — *Chattanooga State Community College*	
KIERLAND 4C *(▲ Statistics)*	**A Graphical Interface for R and Python; Data Desk and Data Science** — Paul Velleman — *Cornell University*	**Goodbye Chalkboard! Hello Mobility!** — Iva Ballard — *Mississippi State University*	**Simulations via StatCrunch Applets** — George Bratton — *University of Central Arkansas*	**Simulation Tools for Introductory Statistics** — Barbara Bennie — *University of Wisconsin, La Crosse* — Erick Hofacker — *University of Wisconsin, River Falls*		*▲ Statistics* — **Activities for Introductory Statistics** — Carla Hill — *Marist College*		**Is There Room for Data Science in an Introductory Statistics Class?** — Robert Gould — *University of California, Los Angeles*	
TRAILBLAZER E	*⬠ Before Calculus* — **The Mathematics of the Movie Gifted** — Marv Bittinger — *Indiana University - Purdue University Indianapolis*	*◆ Pedagogy, Assessment & Research* — **Effective Use of Technology in Teaching Collegiate Math Courses** — Kuppalapalle Vajravelu — *University of Central Florida*	**An Interactive, Activity-based, Technology-driven College Algebra Classroom – Will You Survive?** — Ralph Bertelle — *Columbia-Greene Community College* — Ernie Danforth — *Corning Community College* — Trish Shuart, *Polk State College*	*● Calculus* — **GeoGebra Tools for Visualizing Integration (with Mapping Diagrams)** — Martin Flashman — *Humboldt State University*	**Using CalcPlot3D to Create Dynamic Figures for OER Textbooks and to 3D Print Surfaces for Multivariable Calculus and Beyond** — Paul Seeburger — *Monroe Community College*	*⬠ Before Calculus* — **Quantitative Reasoning Explorations** — Sarah Mabrouk — *Framingham State University* ★	*✦ Corequisite* — **Using Technology in GroupActivities in Co-Requisite College Algebra Courses** — Barbara Johnson — *Indiana University* — Judith Beecher — *Purdue University Indianapolis*		

Legend: ⬠ Before Calculus   ● Beyond Calculus   ● Calculus   ✦ Corequisite   ★ Fellow   ■ Math Education / Teacher Prep   ◆ MyLab Math & Statistics   ◆ Pedagogy, Assessment & Research   ■ Real World Applications   ▲ Statistics

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PRE-CONFERENCE WORKSHOPS: Thursday, March 14 — MyLab Math and MyLab Statistics Workshops*

	8:00-9:45 a.m.	10:00-11:45 a.m.	1:00-2:45 p.m.	3:00-4:45 p.m.
MERRIAM	✦ MyLab Math & Statistics			
	Teaching Successful Online Math Courses Calandra Davis *Pearson*	**Creating a Course: Results by Design** Calandra Davis *Pearson*	**Teaching Corequisite Courses with MyLab Math & MyLab Statistics** Stephanie Walker *Pearson*	**Creating a Course: Results by Design** Stephanie Walker *Pearson*
LOWELL	✦ MyLab Math & Statistics			
	Using MyLab Statistics and StatCrunch Diane Hollister *Pearson*	**Using Learning Catalytics** Diane Hollister *Pearson*	**Custom Question Builder - The Basics** Diane Hollister *Pearson*	**Best Practices for Managing Assignments** Diane Hollister *Pearson*

*Participants of the MyLab Math™ and MyLab Statistics™ pre-conference, hands-on workshops can earn Continuing Education Units.
*Thursday workshops and pre-conference sessions require additional fees. Registered participants will receive breakfast and lunch as part of the registration fee.

MINI-COURSES Friday, March 15 — DON'T MISS: Breakfast & Keynote Address 8:00 a.m.

	10:00-11:30 a.m.	12:30-2:00 p.m.	2:15-3:45 p.m.
MERRIAM	⬠ Before Calculus	■ Real World Applications	
	Graphing with GeoGebra David Ray *University of Tennessee, Martin*	**Assessment: From a Silent Killer of Learning to an Active Driver of Deeper Learning** Kristin Arney, Kayla Blyman, Lisa Bromberg, Scott Lynch, Scott Warnke & Frank Wattenberg *United States Military Academy* ★	**Drones, Climate Science, Hot Cars, Personal and Public Health Policy and Math** Bryan Adams, Diana Thomas & Frank Wattenberg *United States Military Academy*
LOWELL	⬠ Before Calculus	■ Real World Applications	● Calculus
	Modeling with Spreadsheets Eric Gaze *Bowdoin College*	**Welcome to Mathematica®** Jason Gregersen *Michigan Technological University*	**Enhance Your Mathematics Classroom Using Active Learning and Technology** Angie Hodge, *Northern Arizona University* Cindy York, *Northern Illinois University*
TRAILBLAZER A	▲ Statistics	● Calculus	Ⅱ Teaching Math Online
	NEW SESSION: Toward an Ideal Statistical Software for Teaching Introductory Statistics and Beyond Mortaza (Mori) Jamshidian *California State University, Fullerton*	**Maple for the Classroom: Tips, Tricks, and Techniques** Douglas Meade *University of South Carolina* Phillip Yasskin *Texas A&M University* ★	**Camtasia: Beginnings** Sarah Mabrouk *Framingham State University* ★

MINI-COURSES Saturday, March 16 — DON'T MISS: Breakfast & Keynote Address 8:00 a.m.

	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.
MERRIAM	● Calculus	✦ Corequisite		
	Visualizing Multivariable Calculus & Differential Equations Using CalcPlot3D Paul Seeburger *Monroe Community College*	**Designing an Effective Corequisite Program, Including Algebra and Statistics Activities** Jay Lehmann *College of San Mateo*		
LOWELL	● Beyond Calculus	Ⅱ Teaching Math Online	◆ Pedagogy, Assessment & Research	▲ Math Education/ Teacher Prep
	Using a Comprehensive Library of GeoGebra Applets for Linear Algebra James Factor, *Alverno College* Susan Pustejovsky *Alverno College*	**Camtasia: Video Editing** Sarah Mabrouk *Framingham State University* ★	**Mobile Apps for Encouraging Student Interaction in Math Classes** Revathi Narasimhan *Kean University*	**Using Desmos to Encourage Mathematical Discourse and Reasoning** Erick Hofacker *University of Wisconsin, River Falls*
TRAILBLAZER A		▲ Math Education/Teacher Prep		▲ Statistics
		Proofs without Words Demonstrated in Active Videos John Diamantopoulos *Northeastern State University* ★	**GeoGebra Tools for Creating Mapping Diagrams: From Worksheets to Books** Martin Flashman *Humboldt State University*	**Teaching an Online Statistics Course Using MyLab Math** *Statistics* Sam Zhang *Union County College*
TRAILBLAZER B	✦ MyLab Math & Statistics			
	Teaching Successful Online Math Courses Calandra Davis *Pearson*	**Creating a Course: Results by Design** Calandra Davis *Pearson*	**Personalizing the Student Learning Experience** Stephanie Walker *Pearson*	**Teaching Corequisite Courses with MyLab Math & MyLab Statistics** Stephanie Walker, *Pearson*
MAPMAKER B	✦ MyLab Math & Statistics			
	Custom Question Builder – The Basics Diane Hollister, *Pearson*	**Using Learning Catalytics** Diane Hollister *Pearson*		