American Mathematical Association of Two-Year Colleges

47th AMATYC Annual Conference
October 28 – 31, 2021

Sheraton Phoenix Downtown
340 North 3rd Street
Phoenix, AZ 85004

Reservations (online):
https://tinyurl.com/AMATYC2021Sheraton
Reservations (phone):
1.866.837.4213 ext. 4 (mention AMATYC Conference)

Opening Doors Through Mathematics

Keynote Speakers
Lindy Elkins-Tanton
Arizona State University
The NASA Psyche Mission: Journey to a Metallic World

Talithia Williams
Harvey Mudd College
Power in Numbers: Unveiling Hidden Figures

Featured Speakers
James Tanton
Mathematical Association of America
The Astounding Mathematics of Bicycle Tracks

Scott Adamson
Chandler-Gilbert CC
Fired Up to Take Online Teaching Innovations Back to the Classroom!

Hosted by ArizMATYC and the Southwest Region

www.amatyc.org
Mission Statement

To provide high quality professional development, to advocate and collaborate at all levels, and to build communities of learners for all involved in mathematics education in the first two years of college.

Adopted by the Board on April 1, 2016

Core Values

These are the Core Values that guide AMATYC’s internal and external interactions with each other and our community:

- Academic Excellence
- Access
- Collegiality
- Innovation
- Integrity
- Professional Development
- Teaching Excellence
Thursday Keynote Session

Lindy Elkins-Tanton

The NASA Psyche Mission: Journey to a Metallic World

Thursday, October 28 • 3:00 pm – 4:30 pm

“Psyche” is both the name of a metallic asteroid, and the name of the NASA mission to visit that asteroid. Humans have never explored a world made of metal. The presentation will include how missions are planned, who plans them, and the steps to prepare for launch.

Lindy Elkins-Tanton is the Principal Investigator (lead) of the NASA Psyche mission, Managing Director of the Interplanetary Initiative at Arizona State University, and co-founder of Beagle Learning, a tech company training and measuring collaborative problem-solving and critical thinking. Her research concerns terrestrial planetary formation and evolution, and she promotes and practices inquiry and exploration learning. Her mission is to create a generation of problem-solvers.

Elkins-Tanton received her B.S., M.S., and Ph.D. from MIT. She was a researcher at Brown University, faculty at MIT, and a director at the Carnegie Institution for Science before moving to the directorships at Arizona State University. She has collaborated on over 115 articles or chapters, co-authored six books, and was the primary supervisor for at least 20 post-doctoral, graduate, or undergraduate researchers. At ASU she has taught many courses in her research area as well as professional development courses.

Elkins-Tanton has led four field expeditions in Siberia. She is a two-time NAS Kavli Frontiers of Science Fellow and served on the Planetary Decadal Survey Mars panel, and the Mars 2020 Rover Science Definition Team, and now serves on the Europa Clipper Standing Review Board. In 2010 she was awarded the Explorers Club Lowel Thomas prize. Asteroid (8252) Elkins-Tanton is named for her. In 2013 she was named the Astor Fellow at Oxford University. She published the book Earth, co-authored with Jeffrey Cohen, in 2017. She is a fellow of the American Geophysical Union, and of the American Mineralogical Society, and in 2018 she was elected to the American Academy of Arts & Sciences.

Saturday Awards Breakfast Session

Talithia Williams

Power in Numbers: Unveiling Hidden Figures

Saturday, October 30

Breakfast Served: 7:45 am – 8:15 am (ticket required) • Program: 8:30 am – 10:00 am

Hidden Figures brought visibility to African American women serving as NASA “human computers” in the 1960s, dreaming the impossible in a field where their presence was lacking. Demands of today’s STEM workforce require recruiting and training individuals typically underrepresented in math. Hear the speaker’s journey as a woman of color in statistics. Share ways to excite public interest in mathematics, building upon the rich legacy of these Hidden Figures.

Talithia Williams is an innovative, award-winning Harvey Mudd College professor, a co-host of the PBS NOVA series NOVA Wonders and a speaker whose popular TED Talk, “Own Your Body’s Data”, extols the value of statistics in quantifying personal health information. She demystifies the mathematical process in amusing and insightful ways to excite students, parents, educators and the larger community about STEM education and its possibilities.

Williams is a proud graduate of Spelman College (B.A., math), Howard University (M.S., mathematics) and Rice University (M.A., Ph.D., statistics). Her research focus involves developing statistical models that emphasize the spatial and temporal structure of data and applies them to problems in the environment. She’s worked at NASA, the Jet Propulsion Laboratory, and the National Security Agency and has partnered with the World Health Organization on research regarding cataract surgical rates in African countries.

In 2015, she won the Mathematical Association of America’s Henry L. Alder Award for Distinguished Teaching by a Beginning College or University Mathematics Faculty Member, which honors faculty members whose teaching is effective and extraordinary, and extends its influence beyond the classroom. It is this excellence that attracted the attention of online educational company The Great Courses, which selected Williams to produce Learning Statistics: Concepts and Applications in R, a series of lectures in which she provides tools to evaluate statistical data and determine if it’s used appropriately. She is the author of Power in Numbers: The Rebel Women of Mathematics, a full-color book highlighting the influence of women in the mathematical sciences in the last two millennia.

Faith and family round out a busy life that she shares with her husband and three amazing boys. Through her research and work in the community at large, she is helping change the collective mindset regarding STEM in general and math in particular, rebranding the field of mathematics as a logical, productive career path that is crucial to the future of the country rather than dry, technical, or male-dominated.
Scott Adamson
*Fired Up to Take Online Teaching Innovations Back to the Classroom!*
Saturday, October 30 • 10:45 am – 11:35 am

After a year of transitioning to asynchronous, online instruction, it’s time to think about how this work can be leveraged in the return to face-to-face instruction. This session will include discussion of the innovative, online pedagogical strategies that supported student learning that can also be effective in the face-to-face environment.

Scott Adamson is an award-winning mathematics professor who strives to help students develop mathematical reasoning and persistent problem solving as they work to make sense of big mathematical ideas. He structures the classroom environment so that students are afforded the opportunity to make sense of mathematics and strives to develop enthusiastic learners in the classroom. After teaching high school students for 10 years, Adamson currently teaches students at Chandler-Gilbert CC. He holds a B.S. and M.A.T. in Mathematics Education from Northern Arizona University and a Ph.D. in Curriculum and Instruction (emphasis on Mathematics Education) from Arizona State University. He tells his colleagues and himself that we need to stop teaching mathematics and start teaching students! Certainly, we will teach our students the beauty, wonder, and utility of mathematics, but we must realize that the positive relationships that we build with our students are most important! In 2017, at the AMATYC Annual Conference, Scott gave the Opening Session Keynote address which led to a TEDx Talk called “Is it 1957 or 2017?”

---

James Tanton
*The Astounding Mathematics of Bicycle Tracks*
Thursday, October 28 • 1:50 pm – 2:40 pm

It’s a classic in the mathematics community: If you come across the pair of bicycle tracks on the ground, can you determine which way the bicycle went? Find out as the presenter rides his bicycle. Then explore additional surprises about this and see standard geometry put to wild quirky use!

James Tanton (PhD, Princeton 1994, mathematics) is an author, a consultant, and an ambassador for the Mathematical Association of America in Washington D.C., currently serving as their Mathematician-at-Large. He has taught mathematics both at university and high-school institutions. He is absolutely committed to promoting effective and joyful mathematics thinking, learning, and doing at all levels of the education spectrum.

He has written over a dozen books, including The Encyclopedia of Mathematics (Facts on File, 2005) and two wordless puzzle books Without Words and More Without Words (Tarquin, 2015) – which have each been translated in Serbian – and How Round Is a Cube? (AMS, 2020). He advises on curriculum, consults with teachers, and gives demonstration classes, public outreach talks, professional development sessions across the globe.

Tanton created the MAA’s Curriculum Inspirations project, serves as chair of the Advisory Council for the National Museum of Mathematics (New York), serves of the Board of Great Minds, and is founder of The Global Math Project, an initiative set to transform the entire world’s perception of what mathematics can and should be. At present, over 6.5 million students and their teachers across the planet have taken part in a common joyous piece of mathematics to see how classroom mathematics serves as a portal for human joy, wonder, and delight. James received the 2020 Joint Policy Board for Mathematics Communications Award.

At the 2019 AMATYC Annual Conference, Tanton showed us “A Dozen Proofs that 1 = 2: A Misguided Review of Mathematics” as well as teaching us the International Math Salute (www.youtube.com/watch?v=gSMeawFz0Sw)

He grew up in Adelaide, Australia, and now lives in Phoenix, AZ.
Following the title of each regular session and workshop you will find letter codes identifying the general categories that best describe the focus of the presentation. Speakers were asked to identify up to three Program Keys that best describe their presentation. You may use Whova, the new conference app with more details coming soon, to filter sessions with specific Program Keys. See below for more details about each Program Key. Attendees are encouraged to bring smartphones, tablets, or laptops to fully participate in portions of these presentations: S007, S011, S014B, S023, S029, S036, S044, S046, S053, S059A, S065, S069, S078, S080, S083, S085, S090, S091, S099, S106, S108, S109, S115, S123, S124, and W02.

<table>
<thead>
<tr>
<th>Phoenix Program Keys</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ Equity and Inclusivity</td>
</tr>
<tr>
<td>- Equity, diversity, and social justice in providing mathematics education to all students</td>
</tr>
<tr>
<td>- Collaboration with AMATYC leadership, committees and ANets, and Project ACCCESS to increase awareness about diversity</td>
</tr>
<tr>
<td>IG International, Cultural and General Interest</td>
</tr>
<tr>
<td>- Best practices regarding the teaching and learning of mathematics around the world</td>
</tr>
<tr>
<td>- Professional development opportunities to infuse global perspective in teaching</td>
</tr>
<tr>
<td>- Mathematics or the teaching of mathematics relative to history or any culture or people</td>
</tr>
<tr>
<td>- Topics of general interest</td>
</tr>
<tr>
<td>MI Math Intensive</td>
</tr>
<tr>
<td>- STEM courses: Precalculus, Calculus, and beyond</td>
</tr>
<tr>
<td>MN Math for Non-STEM</td>
</tr>
<tr>
<td>- Courses such as Quantitative Literacy or Reasoning, Liberal Arts Math, or Finite Math</td>
</tr>
<tr>
<td>- Topics such as probability, statistics, or finance which might be used in a QR course</td>
</tr>
<tr>
<td>PD Professional Development and Department/Division Interests</td>
</tr>
<tr>
<td>- Strategies for helping college faculty improve or evaluate their teaching while discovering and implementing best practices</td>
</tr>
<tr>
<td>- Suggestions to address needs, preparation, and inclusion of adjunct faculty</td>
</tr>
<tr>
<td>- Ideas for fostering collaboration and community within or between departments and institutions while providing for student success</td>
</tr>
<tr>
<td>PS Pathways for Student Success</td>
</tr>
<tr>
<td>- Any sequence of courses, including developmental mathematics, that most efficiently leads to the student’s final college-level mathematics course in the field of study</td>
</tr>
<tr>
<td>- Student placement into the correct mathematics course, program, or pathway using various advising tools or multiple measures</td>
</tr>
<tr>
<td>- Assessment of student proficiency, courses, or programs</td>
</tr>
<tr>
<td>SM Strategies and Mindset for Student Success</td>
</tr>
<tr>
<td>- Improvement of the quality of developmental mathematics programs to better prepare students for success</td>
</tr>
<tr>
<td>- Strategies for enabling students to take ownership for learning, deal with math anxiety, and gain confidence to succeed by developing a mathematical mindset</td>
</tr>
<tr>
<td>ST Statistics</td>
</tr>
<tr>
<td>- Statistics</td>
</tr>
<tr>
<td>- Statistical literacy</td>
</tr>
<tr>
<td>- Data science</td>
</tr>
<tr>
<td>TC Teaching in Grades K-12 and Applying Math to Other Careers</td>
</tr>
<tr>
<td>- Courses to prepare education majors to teach mathematics in K-12</td>
</tr>
<tr>
<td>- Mathematics courses for career and technical programs, both terminal and transfer</td>
</tr>
<tr>
<td>- Courses such as business statistics or business calculus</td>
</tr>
<tr>
<td>- Courses with emphasis on applications and technical communication</td>
</tr>
<tr>
<td>TL Technology and E-Learning</td>
</tr>
<tr>
<td>- Use of technology in course delivery, engagement of students, or collaboration of students and/or faculty</td>
</tr>
<tr>
<td>- Hybrid, blended, or online courses</td>
</tr>
</tbody>
</table>

**Impromptu Room**

This year's informal breakout room will be available for conversation and collaboration beginning at 9:00 am on Thursday. It will close on Saturday after the last session ends at 3:05 pm. If you already know the topic you would like to discuss, sign up Wednesday night, near the Registration area. Easels will be waiting for you outside Ahwatukee A. Share your scheduled get-together through the new conference app, on the AMATYC Facebook page, or with other social media. Check regularly for new additions to the signs. In past years, the Impromptu Room was used to discuss a “hot topic” that came to mind right before the conference or to meet up to continue discussions begun in sessions.

**Program Over-View Information Begins on page 17**
Complimentary WiFi will be available in all guest rooms booked in the AMATYC block of rooms and in all meeting spaces.

Thursday, October 28

Themed Session
T1 AMATYC Is Making a Positive IMPACT on Student Success
T1A Taking Action and Making a Positive IMPACT on Student Success (SM, PD, TL)
Julie Phelps
T1B Using Metacognitive Prompts to Facilitate a Transition to Proficiency (SM, PD, TL)
Sidra Van De Car
T1C Ownership Isn’t Just About Cars and Houses! (SM, PD)
Karen Gaines
T1D Exploring the Elements of an Engaging Learning Environment (SM, PS, PD)
Charity Jones
T1E Inclusive Teaching Practices that Promote Equity and Inclusion (EQ, SM)
Nancy Sattler
T1F IMPACT Live! (PD, TL)
Evan Evans

Themed Session
T2 Active Learning in the Introductory Statistics Classroom
T2A Rental vs. Professional Frogs – What Does Significantly Different Mean? (ST, SM)
Roxy Peck
T2B Sampling Techniques with the Class Roster – An Ice-Breaker Activity (ST, SM)
Matthew Watts
T2C Estimating with Bootstrapping (ST, SM)
Michael Sullivan
T2D Make a Sampling Distribution from Scratch! (ST, SM)
Luanne Benson-Lender
T2E Engaging Students in Hypothesis Testing Using Bean Sorting (ST, SM)
Grace Nasnas
T2F Random Rendezvous (ST, SM)
Allan Rossman

Themed Session
T3 Equity: From the Personal to the Institutional Level
T3A Rising Through the Ranks – A Minority Perspective (EQ)
Tiane Ellis
T3B Promote Racial Equity in Math with Structural & Relational Practices (EQ, PS, SM)
Helen Burn
T3C Equity in STEM at HSIs: Adaptive Case Studies as Catalysts for Change (EQ, RG)
Guadalupe Lozano
T3D Test, Decision Making, and Antiracism (EQ)
Ralf Yountz
T3E Statistics for Social Justice: A New OER Workbook (EQ, ST)
Daniel Judge
T3F Math for Liberal Arts: A Social Justice Focus (EQ, MN)
Bonnie Blustein

Themed Session
T4 Innovative Assessments to Help Your Students Rise from the Ashes
T4A Busting Open Assessment (PD, SM, TL)
Fred Feldon
T4B Use the Desmos “Play Sounds” to Assess with Non-Searchable Questions (TL, MI, PD)
Rob Eby
T4C The TILT Approach: Transparency in Learning & Teaching (PD, EQ, SM)
Carrie Muir
T4D Who in the Self-Cares About Assessment? (EQ, PD, SM)
Luke Walsh
T4E Writing Non-Searchable Problems (PD, TL, EQ)
Kathleen Almy
T4F Project-Based Assessments (PD, TL, SM)
Pat Riley

Themed Session
T5 Lighting the Fire of Success with Pathways and Corequisites
T5A Corequisites and Pathways 2.0 (PS)
Rachel Bates
T5B Kindling Student Success with Relevant Math Pathways (PS, EQ, SM)
Joan Zoellner
T5C Finding the Right Math Path for Success (PS, MN)
Debi McKee
T5D Opening Doors with Corequisite Opportunities (PS, MN)
Kim Granger
T5E Incorporating Study Skills into Corequisite Classes (SM, PS, EQ)
Jessica Bernard
T5F Implementing Corequisites: Challenges to Consider (PS)
Jeff Thies

Themed Session
T6 Imparting Global Competencies for Student Success
T6A Adding a Global Lens to Mathematics Teaching with the Cricket Game (IG, EQ, SM)
Radhakrishnan (Krish) Palaniswamy
T6B Teaching Mathematics with Indigenous Languages and Cultural Lessons (IG, EQ)
Sandra Willard
T6C Teaching Division with Remainders in a Shanghai Elementary School (IG, TC)
Hong Yuan
T6D Creating Global Citizens in Mathematics Courses Through COIL (IG, TL)
Grace Pai
T6E A Statistical COIL Embracing Global Perspectives (IG, ST)
Irene Duranczyk
T6F Creating and Implementing a Global Project in a Precalculus Course (IG)
Entela Xhane

Wireless High-Speed Internet Service (WiFi)
Complimentary WiFi will be available in all guest rooms booked in the AMATYC block of rooms and in all meeting spaces.
Thursday, October 28

 hà Thursday 8:00 am - 9:10 am hà

S001 AMATYC 101 – Walk and Learn! (PD)
S001A Tour A (8:00 am - 8:50 am)
   Led by April Ström
S001B Tour B (8:20 am - 9:10 am)
   Led by Sophia Georgiakaki

 hà Thursday 9:10 am - 10:00 am hà

S002 A Simple Activity that Spans Multiple Mathematical Levels (SM)
   Paul McCombs

S003 What Are Hyperbolic Functions? (MI)
   Doug Runge

 hà Thursday 10:20 am - 11:10 am hà

M01 Research in Mathematics Education for Two-Year Colleges Committee Meeting
   Chair: Ann Sitomer

S004 AMATYC’s Journey to Mars Program (IG, TC, SM)
   Karen Gaines, Kendall Jacobs, Janet Tarjan

S005 Flip Your Class (or even ONE session) Without Flipping Out (SM, TL, RG)
   Kim Granger, Rokhaya Niang Ndiao

S006 Implicit Bias and Unconscious Bias in the Mathematics Classroom (EQ)
   Gloria Brown Brooks

S007 Value and Logistics of Collecting Written Work In Online Math Courses (TL, SM)
   Amy Barnsley

S008 The British Mathematical Impact: Newton, Cayley, and Beyond (IG, MI)
   David Price, Elise Price

S009 Math Mentoring During the COVID-19 Era (SM, PD, PS)
   Ben Moulton, Serena Buss, Quetzal Martinez, Jake Reed

S010 Grass Roots Movement: Creating a Local Math Mini-Conference (PD, IG)
   Caroline Sampson, Matthew Simmons

S011 Using an Actual Escape Room in Calculus 1 (Some Will Play Also!) (MI, SM, TL)
   Rob Eby

S012 Hollywood Math (IG, TC, SM)
   Karishma Punwani

 hà Thursday 11:20 am - 12:35 pm hà

C1 Gradescope by Turnitin: Throw Your Red Pen in the Fire: A Streamlined Approach to Grading
   Lyn Riverstone, Sara Clark

 hà Thursday 11:30 am - 12:20 pm hà

M02 Data Science Subcommittee Meeting
   Chair: Ambika Silva

   Kathleen Almy

S021 Discussion Forum Triumphs and Tragedies: Online to Remote to F2F (SM, TL)
   Johanna Debrecht

 hà Thursday 11:30 am - 12:25 pm hà

Mini Sessions

S013A Let’s Talk About Transition! (PS, PD)
   Rhea Becke

S013B Competency Tests for Teacher Prep Students? (TC)
   Valerie Cope, Kinga Oliver

S014A The Case for Better Technology in Introductory Statistics (ST, TL)
   Roxy Peck

S014B Classroom Stats: The Fun, Fast, Free Way to Engage Students (SM, ST, TL)
   David Taylor, Adam Childers

S015A Favorite Problems for Engaging Liberal Arts Students (MN, SM)
   Larry Blaine

S015B Is Your Foot a Foot? (SM, IG, MN)
   Natalya Vinogradova

S016A What is the Collatz Conjecture and Why Is It so Interesting? (MI, IG)
   Alexander Atwood

S016B Using Eisenstein Integers to Generate Eisenstein Triples (MI)
   Eric Hutchinson

S017A Factoring Trinomials – Can It Be Done This Way? (IG, MI)
   Christopher Riola

S017B Factoring Quadratics (Really!) (MI)
   Russell Penner

S018A More Equitable Grading in Calculus with Second Chance Grading (MI, TL, SM)
   Peter Keep

S018B Validating Solutions to One-Variable Equations (SM, MI)
   Matthew Watts

S019A Evaluating Online Homework Using the Depth of Knowledge Framework (TL, SM, PD)
   Jesse Friedman, Zack Conner

S019B Assessing Student Knowledge in the Era of Smart Phone Apps (TL, SM)
   Dona Boccio, Zeynep Akcay Ozkan

Forums

AMATYC Forums for positions statements have been held virtually throughout the year rather than on Thursday evening during the conference.
### Thursday, October 28

**Thursday 12:40 pm - 1:30 pm**

- **M03** Division/Department Leadership ANet Meeting  
  Leader: Christine Mirbaha

- **S022** Developmental Pathways 1.02+ (PS, PD)  
  Dan Fahringer, Mallary DeSantis

- **S023** K-12 Statistics and Data Science: The Influence of Two-Year Colleges (ST, TC)  
  Christine Franklin

- **S024** Yes ... You Have Time To Cover That (SM, TL)  
  Pat Riley

- **S025** Developing Statistical Thinking in a Social Justice Context (ST, EQ, SM)  
  Mark Earley

- **S026** Project SLOPE: Blazing New Paths with SoTL (RG, PD, SM)  
  Anurag Katyal, Rhea Becke, Luke Walsh

- **S027** Rebel Women of Mathematics (IG)  
  Janet Teeguarden

- **S028** Making an IMPACT in Mathematics Education Using the AMTE Standards (SM, TC)  
  Megan Burton

- **S029** The Phoenix-Word-Problem: A New Life for Online Discussion Prompts (TL, SM)  
  Kirsten Meymaris, Tami Tacker

- **S030** QR FAQ (MN)  
  Dave Sobecki, Brian Mercer

**Thursday 1:40 pm - 2:55 pm**

- **C4** Derivita: From 0-60: Turbocharge Your Math Class in Any LMS  
  Devlin Daley, Mallory Dyer, Charles Ward

- **C5** Lumen Learning: What Differentiates Lumen Learning’s Calculus Courses from Others?  
  Paul Golisch

**Thursday 1:50 pm - 2:40 pm**

- **M04** Teacher Preparation Committee Meeting  
  Chair: Mark Kuhlman

- **S031** Affiliate Sharing Session (PD)  
  Shannon Ruth, Nicole Lang

- **S032** Chairs’ Sharing Session (PD)  
  Christine Mirbaha

- **S033** But ... There Is Already Such a Great Lab for That! (SM, MI, TL)  
  Cindy Moore, Tammy Sullivan

- **S034** Have a Fantastic First Day! (MI, SM)  
  Holly Ashton, David Lawton

- **S035** Undergraduate Research at 2-Year Colleges: Why and How to Make It Work (RG, MI)  
  Guillermo Alvarez Pardo

- **S036** Accommodating and Engaging Virtual Students in a Face-to-Face World! (TL, SM)  
  Marcia Corby, Krysten Pampling

- **S037** A FREE Corequisite College-Ready Math System – The Consortium Grows! (PS, SM, TL)  
  Barbara Illowsky, Richard Rasiej

- **S038** Validating Measures of Quality Instruction for CC Algebra Instruction (EQ, RG)  
  Vilma Mesa, Mary Beisiege, Irene Durancy, Patrick Kimani

- **S039** Self-Efficacy and Anxiety Solutions: Research and Classroom Strategies (SM, PD)  
  Linda Zientek, Paul Nolting

### Featured Speaker

- **S040** The Astounding Mathematics of Bicycle Tracks (IG)  
  James Tanton

**Thursday 3:00 pm - 4:30 pm**

**Thursday Keynote Session**

**Remarks by**  
Kathryn (Kate) Kozak, AMATYC President

---

**Speaker: Lindy Elkins-Tanton**  
The NASA Psyche Mission: Journey to a Metallic World

**Thursday 4:30 pm - 7:00 pm**

**Grand Opening of the AMATYC Exhibits**

### Thursday 7:00 pm - 9:30 pm

**Research Session**

Sponsored by the Research in Mathematics Education for Two-Year Colleges Committee

**Keynote Session – 7:00 pm – 7:50 pm**

- **R1** Culture, Change, and Instruction in Postsecondary Mathematics (RG, PD)  
  Naneh Apkarian

  **Breakout Sessions – 8:00 pm – 8:40 pm**

- **R2** Creating and Applying a Research Reporting Framework for Corequisites (RG, PS)  
  Jacqueline Coomes

- **R3** An Analysis of Substitution Across the 9-13 Curriculum (RG, MI)  
  Aladar Horvath

  **Breakout Sessions – 8:50 pm – 9:30 pm**

- **R4** Mathematics Persistence Through Inquiry and Equity at a Two-Year HSI (RG, PD)  
  Amelia Stone-Johnstone, Mary Pilgrim

- **R5** Gateway Mathematics in the Time of AB705 (and COVID-19) (RG, PS)  
  Brinley Stringer, William Zahner, Ernesto Daniel Calleros
Friday 7:45 am - 9:15 am

Regional Meetings & Breakfast*
Northeast - Sophia Georgiakaki  Mid-Atlantic - Dennis Ebersole
Southeast - Alvina J. Atkinson  Midwest - Jon Oaks
Central - Dale A. Johanson  Southwest - April Ström
Northwest - Sarah Pauley  West - Eddie A. Tchertchian

*Breakfast Served: 7:45 am - 8:15 am
† Ticket Required for Breakfast Portion  †
‡ Meetings Open to All Attendees  ‡
*States, provinces, and territories for each region will be listed in the conference program.
For a description see page 18.

Friday 9:15 am - 10:15 am

Dedicated Exhibit Time
Visit the publishers and other exhibitors - talk to sales representatives, authors, and editors!

Friday 10:00 am - 11:15 am

C7 Edfinity: Find Out Why 300+ Colleges Have Moved to Edfinity for Online Homework
Bob Carmichael

C8 Maplesoft: Discover Maple Learn
Karishma Punwani

C9 Hawkes Learning: Virtual Courses Require Mastery-Based Solutions
Taylor Ireland

Friday 10:15 am - 12:15 pm

W01 Future Educators Fired Up For Math (TC, SM, ST)
Valerie Cope, Kinga Oliver

M06 Equity Committee Meeting
Chair: AJ Stachelek

S048 Mathematics Growth Mindset in the Tutor Center (SM, TL)
Barbara Johnson

M07 Placement and Assessment Committee Meeting
Chair: Rachel Bates

Watch for more details about how to request a presentation for the virtual days of the conference.
Friday, October 29

✦ Friday 12:35 pm - 1:30 pm ✦
Mini Sessions

A: 12:35 pm - 1:00 pm  B: 1:05 pm - 1:30 pm
See page 17 for more information.

S056A Trial by Fire: COVID-19’s Silver Linings for Instructors and Students (IG, TL)
Tami Tacker, Lea Rosenberry

S056B Incorporating Humor into the Mathematics Classroom (PD, SM)
Aaron Harris

S057A Technologies for Sharing Written Work (TL)
Mike Miller

S057B How Do You Spice Up Discussion Boards? (TL, SM)
Mari Menard

S058A Relevant to Whom? Designing a Culturally Responsive Assignment (EQ, SM, ST)
Grace Pai

S058B Racism and the Development of Inferential Statistics (EQ, ST)
Helen Burn

S059A Mastering Prerequisite Skills for Precalculus Algebra (PS, SM, TL)
Stacey Auman, Sarah Horstman

S059B Redesigning Gen Ed Math Classes with Classroom-Embedded Peer Tutors (SM, PS, EQ)
Cheng Chang

S060A Expected Value: Kindling Student Interest (ST, TC, SM)
Leslie Johnson

S060B Perplexing Percentages and Relative Risks (ST, MN)
Allan Rossman

S061A Teaching Statistics with The Islands (ST, TL)
Brigid Dart

S061B Using James Bond as a Central Theme in a Quantitative Literacy Course (MN, SM)
Ben Moulton

S062A Get Applications Today That You Can Use Tomorrow (MN, MI, TC)
Nolan Outlaw

S062B Coreq Mech: Contextualizing Mathematics for Tech Programs (TC, RG, PS)
Elizabeth Weaver

✦ Friday 1:45 pm - 3:45 pm ✦

PS AMATYC Poster Session ... Fired Up for Posters!
(See page 9 for a list of posters.)

✦ Friday 2:45 pm - 4:00 pm ✦

C13 Wiley: Data-Driven Instruction with Mastery-Based Adaptive Technology
Becky Moening, Angie Foster

✦ Friday 2:55 pm - 3:45 pm ✦

M09 Mathematics Intensive Committee Meeting
Chair: Bob Cappetta

M10 Adjunct Faculty Issues ANet Meeting
Leader: Patricia Barrientos

S072 AMATYC Grant Series: NSF Funding Opportunities 2YC Math Faculty (RG)
Sandra Richardson, Michael Davis, Michael Ferrara

S073 Intentionality of Corequisite Courses: A Look at Variability (PS)
Vanessa Hernandez, Anne Cawley

S074 Get Students Fired Up for Math with Collaborative Learning Activities (SM)
Kim Granger

S075 A Counterintuitive Probability Problem: From Simulation to Theory (ST, MN, TL)
Christopher Riola, Peter Keep

S076 Light the Fire – Rallying Faculty Around a Common Goal (PD)
Tami Tacker, Michael Heeren, Kirsten Meymaris

S077 Undergraduate Research During COVID-19: Analyzing Real-World Data (IG, ST)
Barbara Leitherer, Jignasa Rami, Entela Xhane, Roy Dwarka

S078 Fire Up Mathematics via Chemistry: The Mathematics of CO2 Production (TC, PD)
Alvina Atkinson, Sharron Jenkins

S079 Let’s Rise Together from the Ashes of the Disinformation Era (IG)
Maria Andersen
### Friday, October 29

#### 4:05 pm - 4:55 pm

- **M11** Statistics Committee Meeting  
  Chair: Julie Hanson
- **M12** Mathematics for Liberal Arts ANet Meeting  
  Leader: Froozan Afiat
- **S080** Developing Culturally Relevant Math Contexts Through Collaboration (EQ, PD)  
  Aj Stachelek
- **S081** STEMFIT: Mathematical Fitness for STEM Courses (PS, MI, SM)  
  Jayme Wheeler, Sarah Coakley
- **S082** The Importance of Faculty for Student Success (SM)  
  Denise Lujan
- **S083** Geogebra: From Exploration to Creation (MI, MN, TL)  
  Piotr Runge

#### 6:00 pm - 8:00 pm

- **S084** Faculty Math League (MI)  
  Steven Blasberg, Steven Hundert
- **S085** Teaching Math for Elementary Teachers in a Virtual Environment (TC, SM, TL)  
  Luanne Benson-Lender
- **S086** How Many Points Is that Worth? Assessing Problem Solving with Rubrics (PD, SM)  
  Dennis Runde
- **S087** Activate Your Classroom with the Five Practices (SM, PD)  
  Xianwei Van Harpen, Keith Nabb

---

### Poster Session

#### Friday, October 29  
1:45 pm - 3:45 pm

<table>
<thead>
<tr>
<th>Poster ID</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>P01</td>
<td>Increasing Student Success Using RStudio in Introductory Stats Classes (MN, ST)</td>
<td>Lara Bauman</td>
</tr>
<tr>
<td>P02</td>
<td>Integrating Science and Technology into Calculus (MI, TL)</td>
<td>Gary Bolduc</td>
</tr>
<tr>
<td>P03</td>
<td>Time Management Through Peer Support Network (SM)</td>
<td>Katelyn Ellis</td>
</tr>
<tr>
<td>P04</td>
<td>Creating Meaningful Connections Using Discussion Boards at All Levels (SM, TL)</td>
<td>Farrah Chmielnitsky</td>
</tr>
<tr>
<td>P05</td>
<td>Asynchronous Online vs. Face-to-Face Instruction (TL)</td>
<td>Jeff Feuer</td>
</tr>
<tr>
<td>P06</td>
<td>Integration of Growth Activities into Developmental Algebra Courses (SM, TL)</td>
<td>Susan Ficken</td>
</tr>
<tr>
<td>P07</td>
<td>Collaborating with Colleagues Using myAMATYC (PD, TL)</td>
<td>Karen Gaines, Evan Evans</td>
</tr>
<tr>
<td>P08</td>
<td>Student Research League: AMATYC’s Modeling and Research Contest (IG, MI)</td>
<td>Karen Gaines, Vinodh Chellamuthu</td>
</tr>
<tr>
<td>P09</td>
<td>Centers of Mass of Lamina: A Hands-On Approach (MI, SM)</td>
<td>Leslie Glen</td>
</tr>
<tr>
<td>P10</td>
<td>Are Exams Necessary for Students to Master the Material? (SM, TL)</td>
<td>Josh Gross</td>
</tr>
<tr>
<td>P11</td>
<td>Pre-Classwork to Improve Student Success: Intro to Statistics (ST)</td>
<td>Peter Gyeduo</td>
</tr>
<tr>
<td>P12</td>
<td>Strategies for Engaging Students and Supporting Their Success (TL, SM)</td>
<td>Violeta Kovacev-Nikolic</td>
</tr>
<tr>
<td>P13</td>
<td>The Correlation Between Arithmetic Fluency and Student Outcomes (SM)</td>
<td>Thomas Leszcynski</td>
</tr>
<tr>
<td>P14</td>
<td>Using Singularly-Focused Daily Quizzes to Enhance Material Retention (SM)</td>
<td>Mark Lydon</td>
</tr>
<tr>
<td>P15</td>
<td>Readin’ and Writin’ to Learn ‘Rithmetic (MI, SM)</td>
<td>Melissa Menning</td>
</tr>
<tr>
<td>P16</td>
<td>How the Exchange of Knowledge Through Peers Can Improve Grades (SM)</td>
<td>Sohely Perven</td>
</tr>
<tr>
<td>P17</td>
<td>The Corequisite Challenge: Supporting Mathematics and Beyond (SM, PS)</td>
<td>Ashley Pratt</td>
</tr>
<tr>
<td>P18</td>
<td>E-learning Approach (TL, SM)</td>
<td>Radhika Ramjee</td>
</tr>
<tr>
<td>P19</td>
<td>Mindfulness in the Classroom to Relieve Math Anxiety (SM)</td>
<td>Manisha Ranade</td>
</tr>
<tr>
<td>P20</td>
<td>Confronting Underachievement in Introductory Math Classes (SM, RG)</td>
<td>Jane Reed</td>
</tr>
<tr>
<td>P21</td>
<td>Teaching Mathematics Using OER, ZTC, and Technology (TL)</td>
<td>Ivan Retamoso</td>
</tr>
<tr>
<td>P22</td>
<td>Concept Exploration Through Discussion Board in College Algebra (TL)</td>
<td>Jennifer Rice</td>
</tr>
<tr>
<td>P23</td>
<td>Active Learning Activities in a Virtual Calculus Class (MI, SM)</td>
<td>Bhuvaneswari Sambandham</td>
</tr>
<tr>
<td>P24</td>
<td>Teaching for PROWESS: An NSF-Funded AMATYC Project (PD, PS, RG)</td>
<td>Ann Sitomer, Julie Phelps</td>
</tr>
<tr>
<td>P25</td>
<td>Student Understanding of Domain and Range in Calculus I (MI)</td>
<td>Cory Wilson, Deborah Moore-Russo</td>
</tr>
<tr>
<td>P26</td>
<td>Encouraging Spaced Practice for Increased Student Success (SM)</td>
<td>Christel Wohlafta</td>
</tr>
<tr>
<td>P27</td>
<td>New to Full-Time College Teaching? Check Out Project ACCCESS! (PD)</td>
<td>Lisa Feinman</td>
</tr>
<tr>
<td>P28</td>
<td>Mindfulness in the Classroom to Relieve Math Anxiety (SM)</td>
<td>Manisha Ranade</td>
</tr>
<tr>
<td>P29</td>
<td>Confronting Underachievement in Introductory Math Classes (SM, RG)</td>
<td>Jane Reed</td>
</tr>
<tr>
<td>P30</td>
<td>Teaching Mathematics Using OER, ZTC, and Technology (TL)</td>
<td>Ivan Retamoso</td>
</tr>
</tbody>
</table>
Saturday, October 30

Saturday 7:45 am - 10:00 am

Saturday Awards Breakfast Session

Breakfast Served: 7:45 am - 8:00 am*
(*Ticket Required)
Program: 8:30 am - 10:00 am

Presentation of Awards
Kathryn (Kate) Kozak, AMATYC President

Speaker: Talithia Williams

Power in Numbers: Unveiling Hidden Figures

Saturday 10:00 am - 10:45 am

Dedicated Exhibit Time
Visit the publishers and other exhibitors — talk to sales representatives, authors, and editors!

Saturday 10:45 am - 11:35 am

M13 Mathematics Standards in the First Two Years of College (IMPACT) Committee Meeting
Chair: Julie Phelps

S088 Leveraging Algebraic Structure to Support Sensemaking in Algebra (RG, SM, PS)
Natalie McGathey, Dave Feikes, Bill Walker, Bir Kafle

S089 National Recommendations to Improve Quantitative Education for Nurses (TC, PD, MN)
Daniel Ozimek, Joan Zoellner, Beth Kelch, Lindsay Good

S090 Raising Success: Real Collaboration and Mindsets in Online Mathematics (SM)
Kelly Kohlmetz, Lewis Hosie

S091 Utilize StatPREP’s Free Little Apps to Teach Data-Centric Statistics (ST, TL, RG)
Helen Burn, Carol Howald, Thomas Kinzeler, Joe Roith

S092 Group Modeling Projects for Calculus (MI, SM)
Gary Simundza

S093 Author! Author! (PD, IG)
George Alexander, Johanna Debrecht, Keith Nabb

S094 Developmental Mathematics Sharing Session (PS, SM)
Kathryn Van Wagoner

Featured Speaker
S095 Fired Up to Take Online Teaching Innovations Back to the Classroom! (SM, PD, TL)
Scott Adamson

Saturday 10:45 am - 12:45 pm

Committee Meeting
2022 Conference Planning

Saturday 11:55 am - 12:45 pm

M14 Mathematics and Its Application for Careers Committee Meeting
Chair: Nolan Outlaw

S096 Adjunct Issues ANet Sharing Session
Patricia Barrientos

S097 Ideas for Gamification in Online Classes (TL, SM)
Kira Heater

S098 Developing and Supporting Positive Mathematical Identity: It Matters (SM)
Trena Wilkerson

S099 Using “Get It Quick” Videos to Promote Online Student Learning (TL, SM)
Lori Holdren

S100 Stoking the Creative Fire (IG)
Sean Saunders

S101 The Work of Learning: Returning the Hard Tasks of Learning to Students (SM)
Trisha White

S102 Data Science Sharing Session (ST)
Ambika Silva

S103 Placement & Assessment During COVID-19 (PS, PD)
Jeff Thies, Kathleen Almy, Katie Louchart

Saturday 1:05 pm - 1:55 pm

M15 Innovative Teaching and Learning Committee Meeting
Chair: Jennifer Ackerman

S104 Teaching for PROWESS: IMPACTing Active Learning on STEM Pathways (RG, PD, SM)
Scot Pruyn, Scott Adamson, Michael Price, April Ström

S105 Ten Ways to Get Students (Fired) Up and Moving for Active Learning (SM)
Mark Colgan

S106 Collaborating for Equity (EQ, PD)
Paul Gray

S107 Engagement via Escape Room Puzzles in Math Class (SM)
Vicky Mayfield, Sherri Warren

S108 Interactive Math & Science Activities for the ABE Classroom (PS, TL, SM)
Tyler Frank

S109 Incorporating Data Analysis and Writing in Introductory Statistics (ST, SM, TL)
Rebecca Nugent, Philipp Burckhardt, Gordon Weinberg

S110 Online Presence: Designing to Connect (TL, PD, SM)
Sonia Petch, Kyle Kundomal, Martha Chalhoub

Saturday 1:05 pm - 3:05 pm

W02 Connecting Industry to Mathematics Instruction (TC, RG, TL)
Jay Martin, Julia Smith
Saturday, October 30

❤️ Saturday 2:15 pm - 3:05 pm ❤️

S116 Math Intensive Sharing Session (MI)
Bob Cappetta, Mike Caparula, Eric Hutchinson

S117 Groups Work! Utilizing Group Work to Deepen Student Understanding (SM)
Mike Sieve, Heather Howington

❤️ Saturday 3:30 pm - 4:30 pm ❤️

Stay tuned for some exciting new programming! Traditionally, the Delegate Assembly has been held during this block of time. However, with the Delegate Assembly being held virtually on Saturday, November 6, that frees up this time for some great conference enhancements to be added this afternoon. Be sure to save time for this event before you head out to dinner. Details are still being finalized, but you can count on even more great information, creativity, networking, and fun!

Sunday, October 31

❤️ Sunday 8:15 am - 9:05 am ❤️

S118 Cracks in the Mathematics Pipeline: The Transition Years (PS)
John Staley

S119 When Will I Ever Use This?! – Applications for Today’s World (TC, PD)
Nolan Outlaw, Ralph Padgett, Jay Martin, Julia Smith

S120 Fostering Creativity in Developmental Mathematics Students (SM)
Demitrius Moore

S121 Promoting Equity With Course-Based Undergraduate Research Experiences (EQ, RG, ST)
Frank Marfai

❤️ Sunday 9:25 am - 10:15 am ❤️

S122 Designing Introductory Statistics Courses for a 21st Century Student (ST, EQ)
Jennifer Broatch, Frank Savina

S123 A Post Pandemic Proposal (PD, SM, PS)
Jennifer Quinn

❤️ Sunday 10:30 am - 11:15 am ❤️

Phoenix Farewells
Kathryn (Kate) Kozak, AMATYC President

+ Preview of the Delegate Assembly to be held virtually Saturday, November 6
+ Opportunities to get more involved in AMATYC
+ Preview of next year’s conference in Toronto
+ Symbolic passing of the gavel
+ Preview of Phoenix virtual conference days, November 5 and 6
+ Phoenix Adjournment

Virtual Conference Days

While we’ll say goodbyes in Phoenix, the conference will continue! Join us on Friday, November 5, and Saturday, November 6, for the virtual days of the conference, hosted in the same Whova conference app used in Phoenix. Catch encore presentations that you missed in Phoenix. See special virtual-only sessions. Visit our exhibitors in their virtual booths. Continue the networking started in Phoenix, and connect with additional conference participants through virtual meetups in Whova. The conference will officially wrap up with the Delegate Assembly Saturday afternoon. Phoenix conference registration includes the virtual days, or you can register for the virtual days only. See page 13 for registration information.
American Mathematical Association of Two-Year Colleges
47th Annual Conference • Register online at www.amatyc.org

If registering using the Institutional Membership, do not use this form. Instructions on how to register online have been emailed to the contact person at your institution. Call the AMATYC Office at 901.333.5643 if you have any questions.

☐ Check here if this is your first AMATYC conference (see page 16 for details). If first conference, you are encouraged to attend "AMATYC 101" (S001) and to accept the invitation you will receive to participate in the “Get Fired Up for Phoenix” webinar. If you qualify, are an AMATYC member, and are registering prior to the end of the discount registration period, see B. Registration, Item B on the next page.

Name__________________________________________________________

For Name Badge

Member ID#______________________________________________________

Preferred mailing address is: ☐ College/Institution ☐ Home

College__________________________________________________________

College Address_____________________________________________________

City __________________________ State __________ Zip __________

College Phone(_______)______________________________

Email Address_____________________________________________________

☐ Check here if you wish to be included on the list provided to vendors (for invitations to special events, commercial presentations, and other activities).

Will you be bringing a Guest(s)? (See page 17 for eligibility.)

Please type or print guest’s name as it should appear on name badge.

Will you be bringing a Guest(s)? (See page 17 for eligibility.)

Please type or print guest’s name as it should appear on name badge.

Name__________________________________________________________

For Name Badge

Member ID#______________________________________________________

Preferred mailing address is: ☐ College/Institution ☐ Home

College__________________________________________________________

College Address_____________________________________________________

City __________________________ State __________ Zip __________

College Phone(_______)______________________________

Email Address_____________________________________________________

☐ Check here if you wish to be included on the list provided to vendors (for invitations to special events, commercial presentations, and other activities).

ADA Accommodations or Dietary Restrictions: See page 17 for instructions.

<table>
<thead>
<tr>
<th>Registration Method</th>
<th>Discount Registration</th>
<th>Regular Registration</th>
<th>On-Site Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIL (3 pages) using check or credit card</td>
<td>Registration AND payment must be postmarked BY September 30, 2021.</td>
<td>Registration AND payment postmarked AFTER September 30, 2021.</td>
<td>Registrations sent by mail must be postmarked by October 11, 2021. After this date it will be necessary for attendee to bring form and payment with them and register on-site.</td>
</tr>
<tr>
<td>ONLINE using a credit card</td>
<td>Registration AND credit card information must be completed BY October 7, 2021.</td>
<td>Registration AND credit card information completed AFTER October 7, 2021.</td>
<td>Please do not fax form and credit card information after October 11, 2021. It will be necessary for attendee to bring form and payment with them and register on-site.</td>
</tr>
<tr>
<td>FAX (3 pages) to 901.333.5651 using a credit card</td>
<td>Registration AND credit card information must be completed BY October 7, 2021.</td>
<td>Registration AND credit card information completed AFTER October 7, 2021.</td>
<td>Please do not fax form and credit card information after October 11, 2021. It will be necessary for attendee to bring form and payment with them and register on-site.</td>
</tr>
<tr>
<td>IN PERSON using cash, check, or credit card</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Register in person on-site and pay regular rate.</td>
</tr>
</tbody>
</table>

Purchase Orders and Receipts: AMATYC accepts a purchase order ONLY if it is accompanied by payment. Every registration form received in the AMATYC Office or completed online will receive an email receipt. If you do not receive an email receipt, contact the AMATYC Office.

Refund Policy: A refund of 100% of your registration fee less a $25 service fee will be given upon receipt of a written request postmarked by October 13, 2021. A 50% refund less a $25 service fee will be given if your written request is postmarked on or after October 14, 2021, and by October 27, 2021. NO refunds will be given for requests postmarked on or after October 28, 2021. NO refund will be given for membership dues. Requests for return of overpayments must be in writing and received by the AMATYC Office no later than December 15, 2021. All requests should be sent to the AMATYC Office. Refunds for registration fees will be processed two to four weeks after the conference according to the refund policy outlined above. Exceptions to this policy may be approved in some extenuating circumstances. Please contact the AMATYC Office, 901.333.5643, for more information.

Having Trouble?
• Some institutions have “transaction limits” that are separate from your “monthly limit.” If your card is declined, you may need to check your limit with your business/procurement office.
• Another common problem is the vendor type. AMATYC’s credit-card processor has labeled us “Dues, Event Registration, and eStore.” You may need to check with your business/procurement office to see if this is an approved vendor type.

If you have any questions, please contact the AMATYC Office at 901.333.5643 or by email at amatyc@amatyc.org.

Send completed registration form (3 pages) with payment to
AMATYC, 5983 Macon Cove, Memphis, TN 38134

Continue to next page ➔
A. DUES

To be eligible for the member registration rates, membership must be current. Current members with an expiration date of 10/31/2021 or earlier, must renew their dues before registering for the conference in order to take advantage of the member registration rate. Anyone who joins AMATYC may select the member registration rates. If you are not sure of your membership status, please contact the AMATYC Office at 901.333.5643 or amatyc@amatyc.org for assistance.

<table>
<thead>
<tr>
<th>Check one</th>
<th>Member Types</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Individual Membership - One year</td>
<td>$95</td>
</tr>
<tr>
<td></td>
<td>Individual Membership - Two years</td>
<td>$185</td>
</tr>
<tr>
<td></td>
<td>Individual Membership - Three years</td>
<td>$270</td>
</tr>
<tr>
<td></td>
<td>Individual Membership - Lifetime</td>
<td>$1,900</td>
</tr>
<tr>
<td></td>
<td>Adjunct Membership</td>
<td>$48</td>
</tr>
<tr>
<td></td>
<td>Retired Membership</td>
<td>$48</td>
</tr>
<tr>
<td></td>
<td>Associate (Students who are not mathematics educators)</td>
<td>$10</td>
</tr>
<tr>
<td></td>
<td>Institutional — For information, please contact the AMATYC Office at 901.333.5643.</td>
<td></td>
</tr>
</tbody>
</table>

B. REGISTRATION

Persons with current AMATYC membership are eligible to use Categories A, B, D, F, or G. Individuals who join or renew their membership with conference registration are also eligible to use Categories A, B, D, F, or G. Retirees are eligible to use Category F. Adjuncts are eligible to use Category G. Registrants who select Categories A, B, D, F, or G, but whose membership cannot be verified as current will be required to either (1) pay non-member rates shown in Categories C or E or (2) join AMATYC and pay membership dues before their registration can be processed. Persons attending for the first time who are AMATYC members and who register by the Discount Registration deadline are eligible to use Category B.

<table>
<thead>
<tr>
<th>Check one</th>
<th>Payment must accompany registration form. (Payment must accompany a purchase order.) Fax and Web registration payment must be by credit card.</th>
<th>Make appropriate selection(s) where applicable</th>
<th>Discount Registration Postmark by Sept. 30 or via Web or Fax by Oct. 7</th>
<th>Regular Registration Postmark after Sept. 30 or via Web or Fax after Oct. 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>In-Person Conference (October 28–31, 2021) All in-person registration types include the two virtual days of the conference.</td>
<td>Select meals on p. 14</td>
<td>$400</td>
<td>$440</td>
</tr>
<tr>
<td>B</td>
<td>Registration, Current AMATYC Member</td>
<td>Select meals on p. 14</td>
<td>$350</td>
<td>Not Available</td>
</tr>
<tr>
<td>C</td>
<td>Registration, NON-Member, not joining at this time or lapsed member, not renewing at this time (this rate does not include membership)</td>
<td>Select meals on p. 14</td>
<td>$520</td>
<td>$560</td>
</tr>
<tr>
<td>D</td>
<td>Registration, Current AMATYC Member, SINGLE-DAY Attendee</td>
<td>○Thu ○Fri ○Weekend NO meals included; may purchase meal for day selected on p. 14</td>
<td>$150</td>
<td>$190</td>
</tr>
<tr>
<td>E</td>
<td>Registration, NON-Member or lapsed, SINGLE-DAY Attendee</td>
<td>○Thu ○Fri ○Weekend NO meals included; may purchase meal for day selected on p. 14</td>
<td>$175</td>
<td>$215</td>
</tr>
<tr>
<td>F</td>
<td>RETIREE Registration, Current AMATYC Member</td>
<td>NO meals included; purchase meals on p. 14</td>
<td>$200</td>
<td>$240</td>
</tr>
<tr>
<td>G</td>
<td>ADJUNCT Registration, Current AMATYC Member</td>
<td>Select meals on p. 14</td>
<td>$270</td>
<td>$310</td>
</tr>
<tr>
<td></td>
<td>STUDENT Registration. Please contact the AMATYC Office for more information regarding member-sponsored student registration rates.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Virtual Days Only (November 5–6, 2021) All in-person registration types include the two virtual days of the conference.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>Registration, Current AMATYC Member</td>
<td></td>
<td>$25</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>Registration, NON-Member or Lapsed</td>
<td></td>
<td>$125</td>
<td></td>
</tr>
</tbody>
</table>

SUBTOTAL A

SUBTOTAL B

No refunds are given for membership dues.

NOTE: If the following message – Your membership is current and does not expire. – appears under the Membership Information section of your record in the AMATYC database, please disregard. This is not a correct reflection of your membership status. In order to check your membership status to determine which category you are eligible for, click on “Profile Home.” Located underneath your name will be your current membership type, e.g. Individual, Adjunct, Retired, Lifetime, Non-member, etc.

Continue to next page ➔
C. FOOD EVENTS
(Non-Vegetarian includes a meat serving. Vegetarian is a non-meat meal.)

Regional Meetings & Breakfast — Registrant* (full conference or adjunct) Fri., Oct. 29 7:45 am – 8:15 am Included
Select one: ☐ Non-vegetarian ☐ Vegetarian

Awards Breakfast — Registrant* (full conference or adjunct) Sat., Oct. 30 7:45 am – 8:00 am Included
Select one: ☐ Non-vegetarian ☐ Vegetarian

Regional Meetings & Breakfast — Guest of Registrant, Single-Day Registrant, or Retiree Registrant Fri., Oct. 29 7:45 am – 8:15 am tkt.s. @ $50/ea. $____
Select quantity: ☐ Non-vegetarian ☐ Vegetarian

Awards Breakfast — Guest of Registrant, Single-Day Registrant, or Retiree Registrant Sat., Oct. 30 7:45 am – 8:00 am tkt.s. @ $55/ea. $____
Select quantity: ☐ Non-vegetarian ☐ Vegetarian

*If you register for the full conference or adjunct rate and do not make a meal selection, you will automatically be assigned a non-vegetarian meal.

SUBTOTAL C _______________________

D. DONATION to the AMATYC Foundation
Please consider making a donation to the AMATYC Foundation. Anyone making a donation from January 2021 through the close of registration, Friday, October 29, 2021, is eligible to enter the drawings for three prizes. The prizes are (1) a complimentary discount member conference registration for Toronto or a three-year membership, (2) a two-year membership, and (3) a one-year membership.

☐ Developmental Mathematics $____
☐ Foundation Endowment $____
☐ General Development* $____
☐ Grants $____
☐ Leila & Simon Pesko Award $____
☐ Margie Hobbs Award $____
☐ Project ACCCESS $____
☐ Research in Mathematics Education for Two-Year Colleges $____
☐ Standards $____
☐ Student Mathematics League $____
☐ Student Research League $____
☐ Wanda Garner Presidential Student Scholarship Endowment $____

*If a fund is not selected the donation will be placed in General Development.

SUBTOTAL D _______________________

E. REQUIRED (You must check the box for your application to be processed.)
AMATYC is very excited about the return of our in-person conference! Things may look a little different as we implement the health and safety guidelines that are recommended in the fall. COVID-19 related protocols may be in effect at the time of the conference, including, but not limited to, mask or face coverings and social distancing.

☐ I agree to abide by the guidelines set forth by the hotel and/or AMATYC at the time of the conference.

PAYMENT METHOD (AMATYC Tax ID #11-2531258)

SUBTOTAL A _______ + SUBTOTAL B _______ + SUBTOTAL C _______ + SUBTOTAL D _______ = TOTAL _______

By Check (Select one) ☐ College/Institution ☐ Personal Check #________ (Make payable to AMATYC; U.S. funds only)
By Credit Card (Select one) ☐ College/Institution ☐ Personal (Select type) ☐ American Express ☐ Discover ☐ MasterCard ☐ Visa

Name as Appears on Card (please print)_________________________________________________________
Billing Address for Card______________________________________________________________
City/State/Zip__________________________________________________________Expiration Date________
Signature_______________________________________________________________

For AMATYC’s planning purposes, please tell us when you plan to stop by the AMATYC Registration Desk to pick up your materials:

☐ Wednesday, October 27 (4:00 pm – 6:00 pm)
☐ Thursday, October 28 (7:00 am – 6:00 pm)
☐ Friday, October 29 (7:00 am – 4:00 pm)
☐ Saturday, October 30 (7:00 am – 8:00 am, 10:00 am – noon)

+ + Single-Day registration materials are available for pick up on the day for which the registration applies. + +
(You are not committed to pick up your materials on the day selected. AMATYC will use this information to plan staffing at the registration desk.)

For nursing mothers: the Sheraton Phoenix Downtown can provide a private lactation space ensuring a stress-free guest experience for moms and their families. If you wish to make use of this space, please notify Beverly Vance by October 7, 2021, at bvance@amatyc.org.
Hotel Deposit/Fees: A deposit equal to one night’s stay is required to hold each individual’s reservation. Personal check, money order, or a valid American Express, Visa, MasterCard, Diners Card number and expiration date or a guarantee to the master account are acceptable. Should a guest cancel a reservation, the deposit will be refunded if notice is received at least two working days prior to arrival, and a cancellation number is obtained. In the event a guest who has requested a room within the block checks out prior to their reserved checkout date, the hotel will add an early checkout fee to that guest’s account. Guests wishing to avoid an early checkout fee should advise the hotel at or before check-in of any change in planned length of stay.

**On-site Conference Registration**

**Sheraton Phoenix Downtown**

**AMATYC Registration Desk — Valley of the Sun Foyer**

- **Wednesday, October 27** ................................................................. 4:00 pm - 8:00 pm
- **Thursday, October 28** ................................................................. 7:00 am - 6:00 pm
- **Friday, October 29** ................................................................. 7:00 am - 4:00 pm
- **Saturday, October 30** ................................................................. 7:00 am - 8:00 am
- **Saturday, October 30** ................................................................. 10:00 am - Noon

**Room Rates* (per night, includes Internet)**

- Single/Double $189
- Triple $199
- Quad $209

*Children under 18 stay free in their parent’s room

Check-in: 3:00 pm  Check-out: Noon

*Rooms rates are subject to state, local, and occupancy taxes.
Getting There
(all prices quoted are subject to change)

Airports
Phoenix Sky Harbor International Airport (PHX) is the main airport for the Phoenix area. Sky Harbor, dubbed America’s Friendliest Airport, serves more than 120 domestic and international destinations. With 1,200 daily flights – about 500 of them nonstop – Sky Harbor is one of the most convenient airports in the United States. Sky Harbor is served by 18 competitively priced carriers and is located in the middle of the Greater Phoenix area, less than ten minutes from downtown.

Phoenix-Mesa Gateway Airport (AZA), located in southeast Mesa, is a growing regional airport serving the Greater Phoenix area. Gateway Airport serves about 1.3 million passengers per year to more than 35 nonstop destinations. Home to Allegiant, Westjet, and Swoop, Gateway Airport is 40-50 minutes from downtown Phoenix.

Valley of the Sun Transportation
Traveling from Sky Harbor to downtown may be done via taxi, rideshare, or light rail. A taxi will cost $17 and take 15-20 minutes. A rideshare will cost $15-$18 and take 15-18 minutes. To travel the light rail for less than $5, take the PHX Sky Train from the airport to the 44th street station and transfer to the westbound light rail (19th Ave. & Dunlap). Exit at either 3rd Street (walk 3 blocks north) or at the Central Station (walk 3 blocks east on Van Buren and one block north on 3rd Street). This trip takes 45-55 minutes.

Conference Housing
The 47th AMATYC Annual Conference begins on Thursday, October 28, 2021, at the Sheraton Phoenix Downtown located at 340 N. 3rd St, Phoenix AZ 85004. All conference events will be held at the hotel.

A block of guest rooms at reduced rates has been reserved at Sheraton Phoenix Downtown until Friday, October 8, 2021, or until AMATYC’s room block is sold out, whichever comes first. Any unreserved rooms in the block may be released for sale to the general public after this date. AMATYC members have purchased all available rooms the past few years, so make your reservations early! Be sure to mention that you are attending the AMATYC Annual Conference if making your reservation by phone. Reservations can be made at the link on the AMATYC website or by using the hotel link or phone number on page 15 of this program.

A deposit equal to one night’s stay is required to hold each individual’s reservation. Personal check, money order, or a valid American Express, Visa, MasterCard, or Diners Card number and expiration date are acceptable. Should a guest cancel a reservation, the deposit will be refunded if notice is received at least two working days prior to arrival and a cancellation number is obtained. In the event a guest who has requested a room within the block checks out prior to their reserved check-out date, the hotel will add an early checkout fee to that guest’s account. Guests wishing to avoid an early checkout fee should advise the Hotel at or before check-in of any change in their planned length of stay.

Parking
On-site parking is available at the Sheraton Phoenix Downtown for a fee of $26 daily. Valet parking is available for a fee of $38 daily. Please check with the hotel to confirm availability. There are also numerous parking spaces in the downtown area. In addition to public garages and surface lots, there are numerous parking meters which are enforced every day from 8:00 am to 10:00 pm.

Roommate Service
Those wishing to participate in the sharing economy and room with one, two, or three other conference attendees can participate in AMATYC’s Roommate Network. Complete the Roommate Request Form no later than October 1, 2021. The form can be found on the AMATYC website, www.amatyc.org, by clicking on the 2021 Conference link, and then the Roommate Request Form link found on that page. You should be notified within two business days if your request has been received. If you do not receive such an email acknowledgement, please contact Sarah Miller at smiller10@ccccd.edu.

The process will involve putting you in touch with another AMATYC member (or members) wishing to share a room. It will be up to you to finalize the arrangement and send an acknowledgement to Sarah. Note: The roommate service does not make hotel reservations, so it would be very helpful if you already have one, even if one of the roommates may have to process a cancellation. Also, when making a reservation with one or more roommates, be sure to provide the hotel with the names and contact information of all individuals staying in the room.

Registration Information

Registration
The conference registration fee includes admission to all concurrent sessions and workshops, general sessions, committee and ANet meetings, commercial presentations, and the exhibits. Also included are the Friday breakfast and regional meetings and the Saturday morning breakfast.

To qualify for the discount registration rates of $400 member and $520 non-member, registration forms must be postmarked, if submitted via mail, on or before September 30, 2021. If submitted via the web or faxed, the completed registration form must be received on or before October 7, 2021. After these dates, registration will continue at the regular registration rate of $440 (member) and $560 (non-member). Registrations sent by mail must be postmarked on or before October 11, 2021, in order to be processed prior to the start of the conference.

On-site registration will be available at the regular rate ($440 member and $560 non-member). See the back cover of this miniprogram or page 15 for the days and times the registration booth will be open.

Every registration form postmarked by or faxed/mailed by October 11, 2021, will receive an email receipt. If you do not receive an email, contact the AMATYC Office.

At the conference registration desk, you will receive your name badge, program booklet, meal tickets, and other items. Name badges must be worn at all AMATYC functions and conference activities.

First-Time Attendee (FTA) Discount
If you have never attended an AMATYC conference and are an AMATYC member, you are eligible to apply a $50 credit toward the full discount conference registration fee. This credit is only available during the discount registration period. Be sure you check the box at the top of the registration form or at the beginning of the online registration process. [This credit is only available to a first-time conference attendee who is an AMATYC member and is not transferrable to any other person.] If you are not sure you qualify for this credit, email the AMATYC Office at amatyc@amatyc.org to verify.

Single-Day Registration
AMATYC offers a single-day registration to accommodate local adjunct faculty and for others unable to attend the entire conference. Those selecting this option must register for and choose ONE of the following options: Thursday only OR Friday only OR Weekend (Saturday/Sunday) only. This rate may be used only one time and is not eligible for the first-time attendee discount. For single-day registration rates, see the registration form on pages 12-14.

The single-day registration includes admission to all concurrent sessions and workshops, general sessions, committee and ANet meetings, commercial presentations, and the exhibits for the specified day. Single-day registration does not include either the breakfast
on Friday or breakfast on Saturday, but either the Friday regional meetings or the Saturday awards session are open to all registrants for the day on which they are registered. Single-day registrants may purchase special function tickets at the guest ticket price to attend the meal function for that day.

Single-day registration materials are available for pick up at the registration counter on the day for which the registration applies.

Accepted Forms of Payment
AMATYC accepts payment by check, Visa, MasterCard, American Express, and Discover. Payment must accompany a purchase order. If paying by check, please make payable to AMATYC (U.S. funds only).

Exhibitors
Exhibitors who are not also registered as conference participants are invited to attend any session or workshop provided seats are available after all AMATYC registrants are seated.

Registration Refund Policy
Refunds for registration fees may be requested in writing according to the following schedule. No refunds, however, are given for membership dues.

A refund of 100% of your registration fees less a $25 service fee will be given upon receipt of a written request postmarked by October 13, 2021. A 50% refund less a $25 service fee will be given if the written request is postmarked on or after October 14, 2021, and by October 27, 2021. No refunds for non-attendance will be given for requests postmarked on October 28, 2021, or later. Requests for return of overpayments must be in writing and received by the AMATYC Office no later than December 15, 2021. Refunds for registration fees will be processed approximately two to four weeks after the conference as per the refund policy. Exceptions to this policy may be approved in some extenuating circumstances. Please contact the AMATYC Office, 901.333.5643, for more information. This refund policy is also applicable to registrants for a single-day registration.

Guests of Attendees
Guests are always welcome at AMATYC conferences. They can be registered at no cost provided the guest is not a mathematics educator and is accompanied by a conference registrant. Guest registration does not include attendance at the special functions: Friday Breakfast or Saturday Awards Breakfast. Special function tickets may be purchased for your guests.

Policy Related to Guests of Attendees at AMATYC Events
General Policy
AMATYC is a professional organization for mathematics educators, and AMATYC events must serve these educators. AMATYC welcomes family members of its event attendees, as registered guests, at these events, and recognizes that these events may be a positive experience for them.

To ensure that AMATYC events meet attendee expectations that include a pleasant and productive professional development activity, attendees are responsible for their guests’ behavior.

In particular, guests who are minors must be accompanied by the responsible attendee parent or guardian at all times. Attendee parents and guardians should take appropriate steps to ensure that their child’s behavior does not disrupt other attendees, or infringe on their rights to the quality professional development activity they expect and for which they have paid.

Any guest should never prevent access to a session for a professional attendee – particularly, in a case of limited seating availability, materials availability, etc., professional attendees have priority. Children should not normally be in sessions. Exceptions might include when the child is related to the presenter and the child might benefit by being present.

Event officials are empowered and instructed to enforce these rules by taking all actions necessary to control disruptive or nuisance behavior.

Many hotels provide recommendations for in-room child care for guests. Call the hotel as early as possible for service. Arrangements represent a contractual agreement between the individual and the child-care provider. AMATYC assumes no responsibility for the services rendered.

AMATYC-Supplied Computer and Internet Access at AMATYC Events
Guests may only use equipment where permitted by the event officials in charge of that equipment and where such use does not hinder access to the equipment by professional registrants. In addition, guests who are minors may have Internet access only if they are under the immediate and direct supervision of a parent or guardian.

ADA Accommodations/Dietary Restrictions/Nursing Mothers
AMATYC is committed to serving all conference attendees who have disabilities and adheres to the guidelines set forth in the Americans with Disabilities Act (ADA). Attendees with disabilities requiring special accommodations or dietary restrictions should contact Beverly Vance at bvance@amatyc.org before October 7, 2021.

For nursing mothers, the Sheraton Phoenix Downtown can provide a private lactation space ensuring a stress-free guest experience for moms and their families. If you wish to make use of this space, please notify Beverly Vance by October 7, 2021, at bvance@amatyc.org.

Conference Program
This miniprogram is provided as your guide for planning your conference activities. All presentations listed are subject to change. A more detailed program will be included in your registration packet that you will pick up at the conference registration desk.

Phoenix is the debut of the new conference app, Whova. You can download Whova any time at iTunes or Google. Then watch for announcements about when our AMATYC Conference app is ready. Join the pre-conference webinar on September 23 for a demonstration of Whova.

Program Information
Get Fired Up Again for In-Person Committee Meetings
Each Academic Committee, Subcommittee, and ANet has its separate time to meet during the conference. You will find these meetings listed throughout the program as M01-M16 as well as on the app or on the program page that describes the purpose of each committee. Please take the opportunity to attend one – or more – of these meetings to find colleagues with similar interests and to become more involved in AMATYC.

Attend sessions sponsored by each of these groups. Find the list provided on the committees’ program page or app link.

Thursday and Friday
Mini Sessions
Watch for these 25-minute presentations in the middle of the day. They are scheduled two to a room with a 5-minute break if you want to change rooms. You can also grab a quick lunch during part A and still catch part B, or vice versa.

Thursday times are 11:30 am - 11:55 am and then 12:00 pm - 12:25 pm. The Mini Sessions return on Friday, 12:35 pm - 1:00 pm and 1:05 pm - 1:30 pm.

Thursday
Themed Sessions
Hear six 15-minute talks Thursday, 8:00 am to 10:00 am, during Themed Sessions. Speaker changes will be consistent so you can change rooms and themes as often as you like.

T1 The Mathematical Standards in the First Two Years of College (IMPACT) Committee will share how to incorporate the IMPACT Standards and the pillars of PROWESS into your practice.

T2 The Statistics Committee will share ideas for engaging introductory statistics students in active learning.

T3 The Equity Committee will discuss equity in mathematics education from the personal to the institutional level.

T4 The Innovative Teaching and Learning Committee will show how to meet the challenges of authentic assessment.
The Developmental Mathematics Committee will share experiences when implementing Pathways and Corequisites in various models, with best practices and lessons learned.

The International Mathematics ANet will share ideas for engaging students in global learning - looking at pedagogy, virtual exchange with foreign institutions, and examples of a globalized curriculum.

AMATYC 101 — Walk and Learn!
Have fun on a relaxing walking tour of the Sheraton Phoenix Downtown conference floors. Along the way learn about AMATYC, ways to get involved in our organization, and how to stay involved beyond the annual conference. Get to know some of the AMATYC leadership team. Tours will leave from the Impromptu Room, Ahwatukee A, near the Registration area.
Tour A: 8:00 am - 8:50 am
led by April Ström
Tour B: 8:20 am - 9:10 am
led by Sophia Georgiakaki

Affiliate Sharing Session
All current and future affiliate leaders can network, ask questions, share ideas, and learn from each other during this session Thursday at 1:50 pm. Leaders will be Shannon Ruth, president of ArizMATYC, and Nicole Lang, a leader in MmmMATYC. Topics for discussion include affiliate program and conference planning ways to strengthen and grow affiliates, as well as other items proposed by the attendees. Bring examples of what your affiliate has been doing this past year. Brag about your affiliate and help others to get Fired Up about their own!!

Keynote Address and Grand Opening of the Exhibit Hall
The Keynote session begins at 3:00 pm. Lindy Elkins-Tanton of Arizona State University will share her involvement with the NASA Psyche Mission, taking us on a journey to a metallic asteroid. Don't miss the ribbon-cutting for the Grand Opening of the Exhibit Hall immediately following the Keynote session.

Forums
AMATYC hosted virtual forums for position statements throughout the year. Thanks to all who attended for your input. Several position statements will be considered by the AMATYC delegates at the virtual delegate assembly this fall. Details can be found here: www.amatyc.org/PositionStatementsUnderReview.

Research Session
Hosted by the Research in Mathematics Education for Two-Year Colleges Committee
Thursday at 7:00 pm, join colleagues to learn about current research on the teaching and learning of mathematics in the first-two years of college. The evening begins with a keynote address by Naneh Apkarian from Arizona State University who will discuss culture, change, and instruction in postsecondary mathematics. This will be followed by two sets of concurrent sessions focused on findings from exciting research projects of interest to our attendees.

Friday
Warm Up for the Day at the Regional Meetings & Breakfast!
Arrive 7:45 am - 8:15 am with your breakfast ticket. Enjoy the meal while getting to know the people and activities in your region. During the meeting from 8:15 am - 9:15 am, interact with your regional vice president. Network with colleagues from colleges and AMATYC Affiliates in your region while providing input on AMATYC matters. Take advantage of this opportunity to express your views to your state and affiliate delegates regarding Delegate Assembly issues. Your attendance at the meeting of your region is strongly encouraged. Not sure to which region your state or territory belongs? Check the program and the app.

Poster Session: “AMATYC Poster Session ... Fired Up for Posters!”
Meet with colleagues who are sharing their exciting ideas or reporting on their latest research projects in this year’s poster session on Friday afternoon from 1:45 pm - 3:45 pm. Browsing hours are Friday 9:15 am - 3:45 pm. Be sure to take advantage of the scheduled session hours to speak with the poster presenters themselves.

AMATYC Grant Series: NSF Funding Opportunities 2YC Math Faculty
Join Sandra Richardson, Michael Davis, and Michael Ferrara from the National Science Foundation at 2:55 pm to 3:45 pm. Learn about NSF programs and funding opportunities for those teaching in the first two years of postsecondary mathematics in the Division of Undergraduate Education. The presenters will also offer a separate Q&A session in the Impromptu Room during the conference.

Faculty Math League Competition
The FML is a competition based on the Student Math League contests sponsored by AMATYC. The twenty-question multiple-choice exam covering precalculus mathematics will test your problem-solving skills. Compete for individual prizes as well as the traveling Regional Championship Trophy in the 17th Annual FML Competition! Have your calculator and sharpened pencils ready at 4:05 pm.

Saturday
Keep the Fire Going Another Day
Join the Saturday Awards Breakfast (be sure to bring your ticket to be seated and served between 7:45 am and 8:00 am) to hear Keynote Speaker Talitha Williams describe her journey as a woman of color in the field of statistics. Make use of the dedicated hour following her talk for a final visit to our vendors and exhibitors. Continue to look for great sessions and workshops throughout the day, ranging from math and science activities for the ABE classroom to modeling projects and number talks for calculus. Hear about placement and assessment during the time of COVID-19. Watch for an announcement about a special way to close out Saturday afternoon before joining friends for dinner in one of Phoenix’s great restaurants.

Sunday
Phoenix Farewells
Stay Fired Up this morning with presentations about helping students bridge the gap to college courses, foster creativity, see where they can use the mathematics they learn, and engage with number stories told through the years. Then at 10:30 am come together to celebrate our in-person time in Phoenix, share your favorite moments from the past three days, and hear how to be more involved in AMATYC. Then wish your friends well on their homeward journey.

But Wait ... the Conference Continues
The 2021 AMATYC Annual Conference will not be over until the gavel falls at the end of the Delegate Assembly on November 6. Join two days of virtual conference presentations on the Friday and Saturday following our days in Phoenix. Watch for more details.

Exhibits and Commercial Presentations
Exhibits Grand Opening and Dedicated Exhibit Times
The always exciting Grand Opening of the exhibit area will take place on Thursday afternoon from 4:30 pm until 7:00 pm. Explore the latest textbooks, videos, calculators, software, distance learning courseware, and much more. Meet the exhibitors while finding answers to questions about their new products in order to enter drawings for prizes.

Take advantage of dedicated time to visit exhibitors. In addition to the Thursday evening Grand Opening, AMATYC is pleased to feature our exhibitors on Friday from 9:15 am to 10:15 am after the Regional Breakfast and Meetings. On Saturday the exhibitors will be featured from 10:00 am to 10:45 am. These dedicated times will allow you to visit the exhibits without missing sessions. Exhibitors are eager to meet you, discuss your needs, and demonstrate products and services that can provide you with solutions to your classroom needs.
12:35 pm – 1:25 pm to allow our exhibitors to get set up.

Phoenicians love to climb. Hole in the Rock, on Piestewa Peak, ranks at the top of the list. Camelback Mountain (Echo Canyon Trail), and Piestewa Peak rank at the top of the list.

**Smokin’ Hot Night-life**

With almost 300 sunny days per year, Phoenix days are majestic; but, the nightlife scene is pretty spectacular, too. Float and glow in a kayak at night on Tempe Town Lake. Explore galleries, artist studios, collectives, museums, community spaces, and shops on the Roosevelt Row Arts District. Grab some tokens and play at the Cobra Arcade Bar. Take a Moonlit hike at the South Mountain Park and Preserve. Feed your inner child with party-central night at The Duce. See a cult classic or indie flick at Film Bar. Spark the romance during an evening tour of Frank Lloyd Wright’s Taliesin West.

**Restaurants to Fire Up your Taste Buds**

From authentic tacos to Prickly Pear Cactus Margaritas, you’ll find everything your palate desires within walking distance from the hotel. Follow this link for a map of the best food places near the conference hotel: [http://ly5FM/o](http://ly5FM/o).

**Toasty Temperatures**

Phoenix ranks in the top ten as one of the sunniest cities in the United States. With highs typically near 94°F (29°C) and lows typically near 60°F (16°C) during the conference, dressing in layers is the best way to fully enjoy the sunny and dry weather of Arizona. Bring a jacket or sweater for the cool nights in addition to the sunscreen, sunglasses, and sun hat when you pack for your trip.

**Email/Communications**

Complimentary WiFi is available in each guest room booked within the AMATYC block at the Sheraton Phoenix Downtown. Additionally, all meeting space will also be equipped with WiFi. Bring your tablet or phone, take notes in the sessions, and then fill out the session evaluations in the conference app. At each hotel there is a business center with computers and printer available for your use.

**Blazing Hospitality Area**

Come spend some time in the Encanto Foyer Professional Networking/Hospitality Area. We are located on the second floor near many of the session rooms and the Exhibit Hall. We offer a charming spot to sit and chat with other conference attendees, find a great place for lunch or dinner, explore information about local attractions, sign up for short excursions, play some games, learn about the community project and sign the donation card, and grab some quick refreshments.

Members of the Local Events Committee would love to visit with you. Let us help make your conference an outstanding experience in Phoenix. Come see us near Encanto A and B.

**Commercial Presentations**

Several AMATYC exhibitors will conduct commercial presentations to highlight their products and services and train users of these products. These presentations will be located in regular session rooms during the conference. Titles, descriptions, and presenters will be included in the conference program and the conference app. Don’t miss out on the opportunity to learn more about a product or service you have been considering or to learn about new products and services that are available to enhance your students’ learning and your teaching. In addition, some exhibitors will be offering small group training sessions within their booth. Check individual booths for times and titles of these training sessions.

**General Information**

**What to Do in Phoenix**

The conference hotel is in the heart of downtown Phoenix, the fifth largest city in the US. Phoenix’s downtown is a lively mix of business workers and college students. Restaurants and bars near the hotel abound, some catering to quick carryout and others providing leisurely dining. Check out CityScape, the Churchill and the Warehouse District for unique dining experiences. Downtown Phoenix is active with nightlife, theaters, museums, and sports.

For basic needs, you might want to check out Fry’s Grocery Store at 100 E. Jefferson, a 10-minute walk from the hotel.

The Arizona Science Center is for those who love to engage with exhibits. The internationally renowned Heard Museum showcases the art of the native people of Arizona. To get an idea of life in the 1890s in Phoenix, plan a tour of the Rosson House. For those looking for some music, try Arizona Federal Theatre or the Van Buren. Sporting venues, Talking Stick Resort Arena (Suns, Mercury, Rattlers) and Chase Field (D-Backs), are only three blocks from the hotel. Or if you feel like a little exercise, jump on a Grid Bike and explore the downtown art scene.

For outdoor enthusiasts, the city offers access to numerous outdoor endeavors including golf, hiking, rock climbing, hot-air ballooning, desert jeep tours and more. Phoenix lies in a valley surrounded by mountains that Phoenicians love to climb. Hole in the Rock, a valley surrounded by mountains that Phoenicians love to climb, is surrounded by mountains that the Phoenicians love to climb.

**Professional Networking/ Hospitality Room Hours**

**Shining Community Service Project: From Phoenix to Kenya — Sparking a Difference Around the World**

We have a unique opportunity to connect with a village in Kenya to support the school-aged children of the Kamanzi Village! Kamanzi Secondary School is located just two hours outside of Nairobi. Patrick Kimani, who is Mathematics Faculty at Glendale CC in Arizona, served as the Kamanzi Secondary School’s math teacher from 1994–1996 and doubled as the Headmaster from 1995–1996.

One of the challenges in the Kamanzi community is the lack of new uniforms for students to wear to school. Many of the students have very old uniforms, some of which are too big or are just too old to continue wearing. Students are required to have a uniform to attend school, so the lack of a proper uniform is an accessibility obstacle we want to help overcome. On behalf of AMATYC, we plan to provide new uniforms to the 130 students in grades 9-12. With one full uniform costing approximately $15, we are excited to include your donation toward supporting the Kamanzi children through love and kindness of AMATYC! With a focus on accessibility and equity, any additional funds raised will be used to purchase sanitary needs for female students, tuition fees for underserved students, and address other accessibility challenges facing Kamanzi Village students.

After making your donation online at [http://ly5FM/Donations](http://ly5FM/Donations), head to the Hospitality Area in the Encanto Foyer to sign the card which will be sent to the Kamanzi Village School.

**Photo Contest: #PhoenixPhotoPhun #AMATYC**

We know your time here in Phoenix will be phantastic! We would like to pheature the most phun, phabulous, phenomenal photos in our phinal article for AMATYC News. Post your best pics to social media with the hashtag #PhoenixPhotoPhun #AMATYC and look to see if your pic is picked as one of the Top Phive Photos of the Phoenix Conference!
These presentations are open to all registrants at no charge. All commercial presentations are listed in the Conference Program section according to their day and time.

**Derivita**

**C4** – Thursday, 1:40 pm - 2:55 pm  
**From 0-60: Turbocharge Your Math Class in Any LMS**  
**Devlin Daley, Mallory Dyer, Charles Ward**  
Created by the cofounder of Canvas, Derivita is a first-of-its-kind math platform with 35,000+ questions from Algebra to Calculus III. This session offers a preview of Derivita's latest capabilities, including question authoring, assignment creation, capturing students' handwritten work, and engaging students in real-time using Derivita's Spotcheck.

**Edfinity**

**C7** – Friday, 10:00 am - 11:15 am  
**Find Out Why 300+ Colleges Have Moved to Edfinity for Online Homework**  
**Bob Carmichael**  
Edfinity is a fully adaptive, homework system in use at 300+ institutions for Corequisites/Developmental Math to Multivariable Calculus and beyond. Edfinity can be paired with any commercial or OER textbook. Student access costs $14 to $29 per term inclusive of support. Migration from any other platform is easy.

**Gradescope by Turnitin**

**C1** – Thursday, 11:20 am - 12:35 pm  
**Throw Your Red Pen in the Fire: A Streamlined Approach to Grading**  
**Lyn Riverstone, Sara Clark**  
Math instructors struggle to give students detailed, targeted feedback on their handwritten work, while maintaining consistency during the grading process. In this session hear from a fellow instructor who's fired up to tell you how Gradescope helped overcome these struggles, saved time, and improved student learning outcomes.

**Hawkes Learning**

**C9** – Friday, 10:00 am - 11:15 am  
**Virtual Courses Require Mastery-Based Solutions**  
**Taylor Ireland**  
How do students truly grasp content? Competency-based learning sets realistic goals and provides resources for students. Discover how Hawkes’ mastery-based, 3-step approach fosters competency by removing learning aids, adapting to individual skills, providing corrective remediation, and compiling reports for quick intervention before students fall behind. Win a giftcard!

**C12** – Friday, 12:25 pm - 1:40 pm  
**Customizing Hawkes Courses to Engage Students in Any Environment**  
**Taylor Ireland**  
Learn how to tailor the Hawkes automated homework system to create a more focused, interactive, and engaging learning experience for your students. Discover how to edit pre-built instructional content to engage students, design assessments with personalized settings, build your own questions, and more in Hawkes. Win a giftcard!

**Lumen Learning**

**C5** – Thursday, 1:40 pm - 2:55 pm  
**What Differentiates Lumen Learning’s Calculus Courses from Others?**  
**Paul Golisch**  
Lumen's new Calculus courses include integrated prerequisite material, application assignments, an interactive textbook, and a capstone project. Lumen's partnership with Desmos enables OHM to seamlessly integrate interactives and three types of calculators (basic/scientific/graphing). Join this session to learn how to easily customize courses to meet your students’ needs.

**Maplesoft**

**C8** – Friday, 10:00 am - 11:15 am  
**Discover Maple Learn**  
**Karishma Punwani**  
Teaching, learning, and doing math just got easier! See a demonstration of Maple Learn, the online version of Maple designed specifically for math education, from high school to university, providing an engaging online environment for teaching and learning math, in classrooms or remotely. Bring your laptop for a hands-on experience.

**Pearson**

**C11** – Friday, 12:25 pm - 1:40 pm  
**Visual & Conceptual Understanding in Statistics, Precalc & Calculus**  
**Bonnie Rosenblatt, Aaron Warnock**  
Building a solid conceptual understanding of certain topics in statistics, precalculus, & calculus can be difficult. New tools available in MyLab Math can help students visualize the most difficult topics to deepen their understanding. MyLab Statistics has learning tools that can bring the relevancy of data to the forefront.

**Wiley**

**C13** – Friday, 2:45 pm - 4:00 pm  
**Data-Driven Instruction with Mastery-Based Adaptive Technology**  
**Becky Moening, Angie Foster**  
Students enter the classroom with different levels of academic ability, which can be a challenge for both students and instructors. Knewton Alta, a mastery-based adaptive technology, provides students a personalized learning experience complete with just-in-time instruction and refreshers. The end result? Learning that lasts.

---

McGraw Hill is conducting the following commercial presentation – C10, Friday, 12:25 - 1:40 pm. The title and description will be included in the conference program.
2021 AMATYC Foundation Awards

Join us in congratulating four AMATYC members at the annual conference in Phoenix:

Matthew Pragel
Harrisburg Area CC (PA)

Laurie Beth Keatts
Catawba Valley CC (NC)

Grace Pai
Guttman CC CUNY (NY)

Guillermo Alvares Pardo
Cuesta College (CA)

Looking for a way to honor, recognize, or remember a colleague, mentor, outstanding presenter, or leader? Gifts to the AMATYC Foundation can be made in honor or memory of anyone. Donations can also be designated to support AMATYC's Student Mathematics League, the Student Research League, the Regional Scholarship fund, or any number of other funds. Stop by the Foundation table in Phoenix for details.

Also, one-time or recurring donations to the AMATYC Foundation can be made online at any time at https://amatyc.org/donations/.

Foundation donations made in 2021, through Friday, October 29, will be entered into the drawing for prizes to be awarded in Phoenix.

Thanks for your support!
AMATYC Executive Board

Kathryn (Kate) Kozak  
President  
Coconino CC  
Flagstaff, AZ  
kathryn.kozak@amatyc.org

Laura Watkins  
President-Elect  
Glendale CC  
Glendale, AZ  
laura.watkins@amatyc.org

Barbra Steinhurst  
Treasurer  
Portland CC  
Hillsboro, OR  
barbrasteinthurst@amatyc.org

Sophia Georgiakaki  
Northeast Vice President  
Tompkins Cortland CC  
Dryden, NY  
georgis@tc3.edu

Alvina J. Atkinson  
Southeast Vice President  
Georgia Gwinnett College  
Lawrenceville, GA  
AAtkinson@amatyc.org

Dale A. Johanson  
Central Vice President  
Northeast CC  
Norfolk, NE  
dale@northeast.edu

Sarah Pauley  
Northwest Vice President  
Western Wyoming CC  
Rock Springs, WY  
spauley@westernwyoming.edu

James (Jim) Ham  
Past President  
Delta College  
University Center, MI  
jimham@amatyc.org

Nancy J. Rivers  
Secretary  
Wake Technical CC (retired)  
Charlotte, NC  
nriversnc@gmail.com

Dennis C. Ebersole  
Mid-Atlantic Vice President  
Northampton CC  
Bethlehem, PA  
debersole@northampton.edu

Jon Oaks  
Midwest Vice President  
Macomb CC  
Warren, MI  
midwestvp@ amatyc.org

April Ström  
Southwest Vice President  
Chandler-Gilbert CC  
Chandler, AZ  
april.strom@amatyc.org

Eddie A. Tchertchian  
West Vice President  
Los Angeles Pierce College  
Woodland Hills, CA  
tchertea@piercecollege.edu

AMATYC Executive Director

Anne Dudley  
Executive Director  
Glendale CC, Emerita  
Glendale, AZ  
adudley@amatyc.org

Phenix 2021 Conference Planning Team

Turi Suski  
Conference Coordinator  
Fox Valley Tech College  
Appleton, WI  
920.735.4716  
suski@fvtc.edu

Nathalie M. Vega-Rhodes  
Asst. Conference Coordinator  
McGraw Hill  
Houston, TX  
conferenceassist@amatyc.org

James (Jim) Ham  
Past President  
Delta College  
University Center, MI  
jimham@amatyc.org

Nancy J. Rivers  
Secretary  
Wake Technical CC (retired)  
Charlotte, NC  
nriversnc@gmail.com

Dennis C. Ebersole  
Mid-Atlantic Vice President  
Northampton CC  
Bethlehem, PA  
debersole@northampton.edu

Jon Oaks  
Midwest Vice President  
Macomb CC  
Warren, MI  
midwestvp@ amatyc.org

April Ström  
Southwest Vice President  
Chandler-Gilbert CC  
Chandler, AZ  
april.strom@amatyc.org

Eddie A. Tchertchian  
West Vice President  
Los Angeles Pierce College  
Woodland Hills, CA  
tchertea@piercecollege.edu

AMATYC Office  
Southwest Tennessee CC  
5983 Macon Cove  
Memphis, TN  38134  
Phone:  901.333.5643  
Fax:  901.333.5651  
Website:  www.amatyc.org  
Email:  amatyc@amatyc.org

Beverly Vance, Office Director  
Christy Hunsucker, Accounting Director  
Christine Shott, Publications Director  
Angela Poulin, Technical Clerk

Please send address changes to the above address or by email to amatyc@amatyc.org.

On-site Conference Registration  •  Sheraton Phoenix Downtown  •  Valley of the Sun Foyer

Wednesday, October 27 ................................. 4:00 pm - 8:00 pm
Thursday, October 28 ................................. 7:00 am - 6:00 pm
Friday, October 29 ................................. 7:00 am - 4:00 pm
Saturday, October 30 ................................. 7:00 am - 8:00 am
Saturday, October 30 ................................. 10:00 am - Noon