OnLine Seminar on Undergraduate Mathematics Education
https://olsume.org
2017–2018

Sep 12  Curated Courses in Mathematics
    Petra Bonfert-Taylor, Dartmouth
    Sara Eichhorn, University of California, Irvine
    David Farmer American Institute of Mathematics
    Jim Fowler, Ohio State University

Sep 26  Rolling the dice: Flipping an introductory probability and statistics class
    Jerry Orloff and Jon Bloom, Massachusetts Institute of Technology

Oct 10  Mathematical manipulatives: The MIT Mathlets
    Haynes Miller and Jennifer French, Massachusetts Institute of Technology

Oct 24  From lecture to active learning: Rewards for all, and is it really so difficult?
    David Pengelley, Oregon State University

Nov 7   MAA’s Instructional Practice Guide: Introduction to a new resource
    Beth Burroughs, Montana State University

Nov 21  Transforming the gateway: Redesigning large introductory-level courses
    Teena Gerhardt, Michigan State University

Dec 5   Active learning at Penn: 2013–2017
    Robin Pemantle, University of Pennsylvania

Dec 19  Supporting graduate students for successful teaching experiences
    Emily Braley, Harvard University and Duke University
    Robin Gottleib, Harvard University

Feb 6   Impacting students’ practice of mathematics, especially at critical moments
    Dev Sinha, University of Oregon

Feb 20  Active learning 2.0: Making it inclusive
    Darryl Yong, Harvey Mudd College

Mar 6   The Illinois Geometry Lab: Fostering a culture of undergraduate research
        and community engagement in mathematics departments
        Jeremy Tyson, University of Illinois at Urbana-Champaign

Apr 3   Mathematics emporium with adaptive technology
        Andrew Tonge, Kent State University

Apr 17  A radical approach to calculus
        David Bressoud, Macalester College

May 1   The Inquiry Oriented Differential Equations Project
        Chris Rasmussen, San Diego State University

May 15  Inquiry based learning calculus
        Angie Hodge, University of Nebraska Omaha
2018–2019

Sep 18  Rising to the challenge of diversifying the mathematics community  
Allisa Crans, Loyola Marymount University  
Dave Kung, St. Mary’s College of Maryland

Oct 2  Active Calculus  
Matt Boelkins, Grand Valley State University

Oct 16  Educating the future professoriate: 
Summer Institute for Graduate Teaching Assistants  
Catherine Snyder, Peter Turner, Seema Rivera, Clarkson University

Oct 30  The College Mathematics Instructor Development Source (CoMInDS):  
Supporting faculty who provide professional development to the next generation of college mathematics instructors  
Jack Bookman, Duke University  
Natasha Speer, University of Maine

Nov 13  Ask. Don’t tell.  
Alfonso Gracia-Saz, University of Toronto

Nov 27  Teaching students to communicate as mathematicians: threshold concepts and their application at MIT  
Susan Ruff, Massachusetts Institute of Technology

Dec 11  A mathematics learning community on inclusive teaching  
Gavin LaRose, University of Michigan

Feb 5  Inquiry and engagement in an interactive classroom  
Annalisa Crannell, Franklin and Marshall College

Feb 19  Redesigning a large linear algebra service course – a travel report  
Philipp Hieronymi, University of Illinois at Urbana-Champaign

Mar 5  Teaching probability and statistics from a purely Bayesian point of view  
Sanjoy Mahajan, Olin College of Engineering

Mar 19  Video textbooks in the active learning classroom  
Mike Weimerskirch, University of Minnesota

Apr 2  Inquiry based learning at Michigan  
Ralf Spatzier, University of Michigan

Apr 30  Active learning in calculus at Cornell  
Steve Bennoun and Tara Holm, Cornell University

May 14  Managing college group work and creating groupworthy tasks  
Eric Hsu, San Francisco State University
2019–2020

Sep 10  Course-based undergraduate research experiences: Two examples
Sunil Chebolu, Illinois State University
Haynes Miller, Massachusetts Institute of Technology

Sep 24  A focus on student buy-in: Why it matters and what to do about it
Stan Yoshinobu, California Polytechnic State University

Oct 8  Student-centered assessment of mathematical proficiency
Benjamin Braun, University of Kentucky

Nov 5  Integrating sustainability into the mathematics curriculum
Bree Ettinger, Emory University

Nov 19  Incorporating service-learning into math courses
Sara Billey, University of Washington

Dec 3  Co-creating interactive online exercises
Annoesjka Cabo, Delft University of Technology

Feb 4  A scalable hybrid introductory ODE course
Dave Levermore, University of Maryland, College Park

Feb 18  Who are we?: On the diversity and demographics of the mathematics community
Ron Buckmire, Occidental College

Mar 17  Active learning online: A panel discussion
Rick Cleary, Babson College
Rachel Levi, MAA
Mike Weimerskirsch, University of Minnesota

Mar 31  TPSE’s top ten things every online instructor should do
Abbe Herzig, AMS
Dave Kung, TSPE

Apr 7  Keep it active: Engaging students in virtual classrooms
Rena Levitt, Minerva Schools at KGI

Apr 14  Calculus in context: Introducing calculus ideas through epidemiology models
Eric Stade, University of Colorado, Boulder

Apr 28  Project-based learning
Rachel Levy, Mathematical Association of America

May 12  What mathematical knowledge improves high school math teaching?
Yvonne Lai, University of Nebraska, Lincoln

May 26  Reliable classification of classroom practices using lecture recordings
George Kinnear, University of Edinburgh
2020–2021

Sep 15  A touch of calculus: Shaking up the pre-requisite structure of college mathematics  
Rick Cleary, Babson College

Sep 29  Assessing students’ proofs online  
Chris Sangwin, University of Edinburgh

Oct 13  Creating accessible materials  
Rob Beezer, University of Puget Sound

Oct 27  Quantitative reasoning and intellectual need as design principles for instructional materials  
Jason Martin, University of Central Arkansas,  
Michael Tallman, Oklahoma State,  
Matt Thomas and Aaron Weinberg, Ithaca College

Nov 10  Welcoming freshmen to the world of mathematics  
Uri Treisman and Erica Winterer, University of Texas, Austin

Dec 1  A fun, engaging, and effective approach to teaching calculus  
Shay Fuchs, University of Toronto

Dec 15  Tuning up your remote mathematics teaching  
Maria Anderson, Westminster College

Jan 5  Meaningful, motivating online assessments  
Paul Bourdon, University of Virginia

Jan 19  The value of computational thinking in statistics education  
Jo Hardin, Pomona College

Feb 2  Mathematical proof, online assessment, and high school connections in first-year discrete mathematics  
Doug Ensley, Shippensburg University

Feb 16  Using inquiry and active learning in mathematics - and how COMMITs can help  
Christine von Renesse, Westfield State University

Mar 2  PrairieLearn: A flexible platform for writing randomized auto-grading questions  
Matt West, University of Illinois

Mar 16  Documents for teaching a lesson: Lecture notes and their production  
Vilma Mesa, University of Michigan

Mar 30  A course to prepare students for careers in business, industry, and government – PIC Math  
Michael Dorff, Brigham Young University

Apr 13  The Mathematical Inquiry Project  
Bus Jaco and Mike Oehrtman, University of Oklahoma

Apr 27  Mastery-based grading in higher education  
Silvia Huebach and Sharona Krinsky, Cal State LA

May 11  Onboarding instructors to an active-learning class  
Jason Siefken, University of Toronto
2021–2022

Sep 14  A cheat-proof calculus exam?
Lew Ludwig, Denison University

Sep 28  Linear algebra and deep learning
Gil Strang, Massachusetts Institute of Technology

Oct 12  Incorporating research opportunities in undergraduate math courses
Pamela Harris, Williams College

Oct 26  Manipulative calculus: Active learning with 3D models
Stepan Paul, North Carolina State University

Nov 9   Rethinking linear algebra
Rekha Thomas, University of Washington

Nov 23  Mentoring community college math students through transfer
Eddie Tchertchian, Pierce College

Dec 7   Fostering positive collaboration
Kathryn Leonard, Occidental College

Jan 11  Active learning in a remote classroom
Angie Hodge-Zickerman, Northern Arizona University

Feb 8   Open Textbook Initiative
Kent Morrison, American Institute of Mathematics

Feb 22  New Horizons: Exploring the possibilities and benefits of study abroad programs post-pandemic
Vladimir Ivanov (Math in Moscow)
Ran Libeskind-Hadas (Aquincum Institute of Technology)
Ryota Matsuura (Budapest Semesters in Math Education)
Rogelio Ramos Quiroga (Mathematical Sciences Semesters in Guanajuato)
Kathryn A. Ziegler-Graham (Budapest Semesters in Mathematics)

Mar 8   Calculus at multiple scales: Successes and challenges
Phil Gressmann, University of Pennsylvania

Mar 22  Adapting active learning in precalculus and calculus courses to changing conditions
Martina Bode, University of Illinois at Chicago

Apr 5   Geometric reasoning in multivariable calculus
Tevian Dray, Oregon State University

Apr 19  Computer theorem provers in the classroom?
Kevin Buzzard, Imperial College London

May 3   Reimagining mathematical experiences for students in introductory courses
Brendan Kelly, Harvard University
Sep 13  The Inquiry-Oriented Linear Algebra Project
Megan Wawro, Virginia Tech

Sep 27  Reshaping the calculus sequence for engineering majors
Gianluca Guadagni, University of Virginia

Oct 11  Embodied cognition: What is it? How does it involve mathematics?
Hortensia Soto, Colorado State University

Oct 25  Improving student outcomes in mathematics: What do we know?
What can we (reasonably) do?
Wendy Smith, University of Nebraska

Nov 8   An implementation of standards-based grading in a large linear algebra class
Rose Morris-Wright, Middlebury College

Nov 22  Assessing mathematical virtues, not just skills
Francis Su, Harvey Mudd College

Dec 6   Reflections on a year at the Museum of Mathematics
Steve Strogatz, Cornell University

Jan 24  Playing from the sidelines: Sports analytics
Tim Chartier, Davidson College

Feb 7   Authentic assessment for today’s students
Diana Skrzydlo, University of Waterloo

Mar 7   Using Slopes to enhance learning in differential equations
Tim Lucas, Pepperdine University

Mar 21  Establishing sustainable active learning in linear algebra
Marie MacDonald, Cornell University

Apr 4   The studio and the stadium
Fok-Shuen Leung, University of British Columbia

Apr 18  A survey of programs for preparing graduate students
to teach undergraduate mathematics
Emily Braley, Johns Hopkins University

May 2   Using conceptual analysis to resolve the tension between advanced
and secondary mathematics: The cases of equivalence and inverse
John Paul Cook and April Richardson, Oklahoma State University
2023–2024

Sep 12  Implementing projects in abstract algebra
        Judy Holdener, Kenyon College

Sep 26  Reducing the research to practice gap (R2PG) with faculty team collaboration
        Sheila Tabanli, Rutgers University

Oct 10  Teaching dynamics to biology undergrads
        Alan Garfinkel, UCLA

Oct 24  Encouraging and supporting the adoption of alternative grading methods in higher education
        Rachel Weir, Allegheny College

Nov 7   Active learning in proof-based math courses
        Lisa Carbone, Rutgers University