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 epidemicology 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
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<td>A touch of calculus: Shaking up the pre-requisite structure of college mathematics</td>
<td>Rick Cleary, Babson College</td>
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<td>Assessing students’ proofs online</td>
<td>Chris Sangwin, University of Edinburgh</td>
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<td>Creating accessible materials</td>
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<td>Quantitative reasoning and intellectual need as design principles for instructional materials</td>
<td>Jason Martin, University of Central Arkansas, Michael Tallman, Oklahoma State, Matt Thomas and Aaron Weinberg, Ithaca College</td>
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<td>Welcoming freshmen to the world of mathematics</td>
<td>Uri Treisman and Erica Winterer, University of Texas, Austin</td>
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<td>A fun, engaging, and effective approach to teaching calculus</td>
<td>Shay Fuchs, University of Toronto</td>
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<td>Tuning up your remote mathematics teaching</td>
<td>Maria Anderson, Westminster College</td>
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<td>Paul Bourdon, University of Virginia</td>
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<td>The value of computational thinking in statistics education</td>
<td>Jo Hardin, Pomona College</td>
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<td>Mathematical proof, online assessment, and high school connections in first-year discrete mathematics</td>
<td>Doug Ensley, Shippensburg University</td>
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<td>Christine von Renesse, Westfield State University</td>
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<td>Matt West, University of Illinois</td>
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<td>Documents for teaching a lesson: Lecture notes and their production</td>
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<td>Silvia Huebach and Sharona Krinsky, Cal State LA</td>
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<td>Onboarding instructors to an active-learning class</td>
<td>Jason Siefken, University of Toronto</td>
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<td>A cheat-proof calculus exam?</td>
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<td>Linear algebra and deep learning</td>
<td>Gil Strang, Massachusetts Institute of Technology</td>
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<td>Pamela Harris, Williams College</td>
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<td>Manipulative calculus: Active learning with 3D models</td>
<td>Stepan Paul, North Carolina State University</td>
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<td>Rethinking linear algebra</td>
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<td>Fostering positive collaboration</td>
<td>Kathryn Leonard, Occidental College</td>
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<td>Angie Hodge-Zickerman, Northern Arizona University</td>
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| 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           |
2022–2023

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