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 Gottlieb, 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
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
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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 Levy, 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 epidemeology 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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Lew Ludwig, Denison University

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Gil Strang, Massachusetts Institute of Technology

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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

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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

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Martina Bode, University of Illinois at Chicago

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Tevian Dray, Oregon State University

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Kevin Buzzard, Imperial College London

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Brendan Kelly, Harvard University
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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

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

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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  

Nov 21  Developing math projects that are authentic and allow student voice and choice  
Paul Hand, Northeastern University  

Dec 5  Math (Education) for AI safety  
Lionel Levine, Cornell University  

Feb 6  Strategies for equitable and engaging mathematics teaching  
Daniel Reinholz, San Diego State University  

Feb 20  The calculus baseline assessment  
Caroline Junkins, McMaster University  

Mar 5  Niek de Kleijn, Delft University of Technology  

Mar 19  Ankur Moitra, Massachusetts Institute of Technology  

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Apr 16  Ray Levy, North Carolina State University  

Apr 30  Deborah Moore-Russo, University of Oklahoma