

Scott Surgent

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Education

University of California, Riverside. Degree: Bachelor of Science, Mathematics.

University of California, Riverside. Degree: Master of Science, Mathematics.

Australian National University, Canberra. Undergraduate year spent abroad through a scholarship of the University of California Education Abroad Program.

Teaching and Service History**Arizona State University, School of Mathematics and Statistical Sciences (SoMSS)**

Principal Lecturer (Teaching Professor): 2012-current (Senior Lecturer: 2003-12; Lecturer: 1997-2003; Instructor: 1995-97; Faculty Associate: 1994-95);

Teaching: Math 110 (Enhanced Freshman Mathematics), Math 114/142 (College Mathematics), Math 113 (College Algebra Plus), Math 117 (College Algebra), Math 119 (Finite Mathematics), Math 122 (University Mathematics), Math 170 (Pre-calculus), Math 210 (Brief Calculus), Math 211 (Mathematics for Business Analysis), Math 242 (Introductory Linear Algebra), Math 251 (Calculus for the Life Sciences), Math 265 (Engineering Calculus I), Math 266 (Engineering Calculus II), Math 267 (Engineering Calculus III), Math 270 (Calculus with Analytic Geometry I), Math 271 (Calculus with Analytic Geometry II), Math 272 (Calculus with Analytic Geometry III), Math 275 (Modern Differential Equations) and Math 343 (Applied Linear Algebra). Responsible for syllabus and test construction, creation of projects and activities, grading, holding office hours for outside tutoring of my students, adjudication of occasional student complaints or requests, as well as various day-to-day tasks associated with teaching. Have taught in the traditional, hybrid, emporium and online modalities.

Director, First Year Mathematics, 2011-21. Handled teaching assignments and scheduling for many of the 100 and 200-level courses, student complaints, equivalency requests, advisement issues, outreach with other departments, sat on the lecturer and instructor hiring committees 2012, chaired the lecturer and instructor hiring committees 2013-20 inclusive.

Coordinator, Online Course Development, 2012-21. Oversaw and coordinated the development of our online offerings, coordinate video shoots, powerpoint construction, timelines, work with ASU-Online to coordinate building of course shells for our online mathematics and statistics courses. Personally involved with Math 242 (creator of powerpoints that are integrated with the video lectures, 16 videos, and presenter in 4 videos) and Math 267 (Presenter on video, 28 video lectures).

Course Coordinator. Lead coordinator for many courses during my tenure in our department. Duties include creating a common syllabus and homework sets, create core test problems and oversee test construction among the various instructors, and to hold meetings at various times throughout the semester to discuss the progress of the course, gain feedback, and attempt to incorporate various ideas into the forward progress of the course. Essentially, the role of a coordinator is to ensure a sense of consistency from section to section, and yet to allow the individual instructors the freedom to use their various strengths within their classrooms.

Developer & Coordinator: Math 122, University Mathematics: 1997-99; Math 211, Mathematics for Business Analysis: 2004-07. Both brand-new courses. In particular, since Math 211 was to be replicated by our associated Community Colleges, I met with representatives from the schools, hosted workshops, or gave presentations about this new course over the academic year 2005-06.

First Year Mathematics Curriculum Development Committee, 1997-98, 2000-01, 2005-06.

University Curriculum Committee, 2005-06.

First-Year Mathematics Personnel & Budget Committee, 2005-08.

Teaching Assistant Training, 2010.

Maricopa Community Colleges Math Instructional Council (MIC), 2011-18.

Math Spine MAT-210 development team, 2021-current.

Conferences

ArizMATYC: Tucson, May 2005. Speaker: "An Introduction to MAT 211: Mathematics for Business Analysis"; Tucson, March 2012; Prescott, October 2012; Phoenix, February 2013. Attendee at the yearly Articulation Task Force meetings, where I also give short 15-minute status updates of our activities.

AMATYC 2010: Boston MA, November 11-14, 2010. Attended as co-author of a textbook published by Pearson.

CMC-3 2011: Orange CA, March 3-5, 2011. California Mathematics Council, mainly composed of the community colleges of Southern California. Attended as a representative for my new textbook.

ICTCM 2011: Denver 2011. Speaker: "Viewing the Third Dimension: Common Misperceptions by Students and the Use of Technology to Assist in Teaching and Visualizing the Third Dimension"; Las Vegas 2015. Speaker: "Building Community with Piazza"; Scottsdale 2019.

Missouri Math Expo: Kansas City MO (UMKC), October 6, 2011. Speaker: "Viewing the Third Dimension: Common Misperceptions by Students and the Use of Technology to Assist in Teaching and Visualizing the Third Dimension" (same talk as at the ICTCM, 2011)

Chair, Organization Committee, Joint ArizMATYC and MAA Conference. ASU-Scottsdale Community College, 2014.

Related Teaching and Development History

Mount San Jacinto Community College, *San Jacinto, California, 1992.*

Maricopa County Community Colleges. *Instructor: Chandler Gilbert Community College, 1992-2006; GateWay Community College, 1992-94; Mesa Community College, 1996, 2007-09; Scottsdale Community College, 2005.*

Course Development & Distance Learning, Rio Salado Community College. Created print-based distance-learning course for Math 187 (Precalculus) during 1998-99. Wrote a 70-page booklet to enhance the material from the textbook. Taught the course 1999-2008. In 2005, oversaw the development and creation of a new internet-based distance learning course for Math 187 using the *MyMathLab* platform. In 2007, created another print-based version of this course specifically for incarcerated students who are not permitted access to the internet.

On-line Problem Writer, Scottsdale Community College, Summer 2009. I wrote nearly 200 problems on the *MyMathLab* platform to be used for their Introductory Algebra course.

Ottawa University, Phoenix Campus, Content Provider, 2010.

Mathematics Publications

Calculus & Its Applications, 10th Edition, co-author with Marvin Bittinger and David Ellenbogen. Published by Pearson (Addison/Wesley), copyright © 2012.

Calculus & Its Applications, Extended Version, 1st Edition, co-author with Marvin Bittinger and David Ellenbogen. Published by Pearson (Addison/Wesley), copyright © 2014. I was the principal author of Chapters 7, 8, 9 and 10 (Trigonometry, Differential Equations, Sequences and Series, and Probability Distributions).

Calculus & Its Applications, 11th Edition, co-author with Marvin Bittinger and David Ellenbogen. Published by Pearson (Addison/Wesley), copyright 2016.

Calculus & Its Applications, 12th Edition, co-author with Marvin Bittinger, David Ellenbogen & Gene Kramer. Published by Pearson (Addison/Wesley), copyright 2020.

Calculus & Its Applications, 13th Edition, co-author with Marvin Bittinger, David Ellenbogen & Gene Kramer. Published by Pearson (Addison/Wesley), copyright 2024, in production, to be released late 2023.

The Vector Calculus Companion 2e (Amazon/KDP, 2022), 350 pages.

The Introductory Differential Equations Companion (Amazon/KDP, 2022), 210 pages.

Technology Experience

Graphing Calculator. Texas Instruments models TI-82/83/83+/84/86. Familiarity with TI-89/92 and Casio models.

Computer Algebra Systems. *Maple*, and to a lesser extent, *Mathematica* and *MATLAB*.

Website Development. I am competent with HTML and create all my websites related to my Mathematics courses. Some experience with CSS.

Internet Homework Platforms. I have used the *Webwork*, *Knewton*, *ALEKS*, *WebAssign* and *MyMathLab* homework platforms at ASU and the community colleges.

Awards and Honors

Arizona Governor's Award for Excellence. Co-recipient 1998.

Arizona State University Student Life Honoree. October 1999.

Winner: Lecturer of the Year award, 2017.

Volunteer

Field Technician: Central Arizona Mountain Rescue Unit (Maricopa County Sheriff's Office), 1997-2004. Treasurer, 2002-2004. Anchor building, ropecraft, mainlines and belaylines, mechanical cliff-face raise and lowering systems. Trained also in alpine, desert, cave, mine and swiftwater rescue environments.

Volunteer. United Food Bank.

Emergency Medical Technician. Nationally certified, 1998-2000, Arizona certified, 1998-2004.