

Dr. Aubrey R. Rhoden

Texas A&M University-Corpus Christi
Science & Engineering, Mathematics & Statistics
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Education

PhD, The University of Texas in Arlington, 2013.

BS, Texas State University, 2007.

Licensures and Certifications

Certificate of Professional Development in Best Practices for Online Course Design, Texas A&M Corpus Christi. (2015 - Present).

Professional Employment

Professional Assistant Professor, Texas A&M Corpus Christi. (June 2014 - Present).

Assistant Professor, East Central University. (August 2013 - May 2014).

I designed and taught a variety of math courses, and performed services for the university.

TEACHING

Teaching Experience

MATH 1314, COLLEGE ALGEBRA
MATH 2413, CALCULUS I
MATH 2414, CALCULUS II
MATH 3311, LINEAR ALGEBRA
MATH 3470, CALCULUS III
MATH 4385, APPLIED MODELING
MATH 5310, LEVELING LINEAR ALGEBRA
SMTE 5104, SEMINAR FOR TEACHING ASSISTANT

Teaching Awards and Honors

Excellence Award for Innovation in the K-12 Classrooms, MAVS GK-12 Program. (2010).

SCHOLARLY AND CREATIVE ACTIVITIES

Publications

Refereed

Conference Proceedings

Rhoden, A., Patong, N., Liu, Y., Su, J., Liu, H. (2013). A Globally Convergent Numerical Method for Coefficient Inverse Problems with Time-Dependent Data. In Larisa Beilina (Ed.), *Applied Inverse Problems - Select Contributions from the First Annual Workshop on Inverse Problems* (vol. 48, pp. 105-128). Springer Proceedings in Mathematics and Statistics.

Journal Articles

Su, J., Liu, Y., Liu, Z.-J., Teng, S., Rhoden, A. R., Pantong, N., Liu, H. (2014). Reconstructions for Continuous-Wave Diffuse Optical Tomography by a Globally Convergent Method. *Journal of Applied Mathematics and Physics*, 2(5), 204-213.
<http://www.scirp.org/journal/jamp>

Pantong, N., Rhoden, A., Yang, S.-H., Boetcher, S., Liu, H., Su, J. (2011). A Globally Convergent Numerical Method for Coefficient Inverse Problems and Its Applications to Thermal Tomography. *Applicable Analysis*, 90(10), 1573-1594.

Presentations

Rhoden, A. R., "Random Equation Selector," Coastal Bend Mathematics and Statistics Symposium, Texas A&M - Corpus Christi, Texas A&M - Corpus Christi. (March 26, 2016).

Rhoden, A. R., "Graduate Level Mathematics for K-12 Students," Mu Theta Alpha's First Meeting, Mu Theta Alpha, King High School. (October 5, 2015).

Rhoden, A. R., "Incorporating more Mathematics into Beach and Dune Management," Beach and Dune Forum, Harte Research Institute, Harte Research Institute. (September 25, 2015).

Rhoden, A. R., "Teaching Calculus Through Applications and Puzzles," Texas MAA Sectional Meeting, Mathematical Association of America, San Antonio, TX. (April 10, 2015).

Rhoden, A. R., "Applications and Adaptations of a Globally Convergent Method," GAANN Day, UT Arlington, UT Arlington. (August 2012).

Rhoden, A. (Author & Presenter), "An Introduction to Calculus for Incoming Freshman," Success U Calculus, UT Arlington, UT Arlington. (August 2012).

Rhoden, A. (Author & Presenter), "A Globally Convergent Numerical Method and Its Applications," ACES Conference, UT Arlington, UT Arlington. (March 2012).

Rhoden, A. (Author & Presenter), "A Globally Convergent Numerical Method and Its Applications," ACES Conference Special GK-12 Session, UT Arlington, UT Arlington. (March 2012).

Rhoden, A. (Coordinator/Organizer), "Modern Medical Imaging: A Brief Overview," Graduate Student Seminar, UT Arlington, UT Arlington. (October 2011).

Rhoden, A. (Author & Presenter), "A Globally Convergent Numerical Method and Its Applications," Workshop on Inverse Problems, Texas A&M - College Station, Texas A&M - College Station. (October 2011).

Rhoden, A. (Author & Presenter), "The Goals and Rewards of College Mathematics," Pre-freshman Engineering Program TexPrep, UT Arlington, UT Arlington. (August 2011).

Rhoden, A. (Author & Presenter), "Is Math Science?," Conference for the Advancement of Mathematics Teaching, the Texas Council of Teachers of Mathematics, the Texas Association of Supervisors of Mathematics, and the Texas Section of the Mathematical Association of America, Grapevine, TX. (July 2011).

Rhoden, A. (Author & Presenter), "An Introduction to Optical Tomography and the Laplace Transform," Graduate Student Seminar, UT Arlington, UT Arlington. (March 2011).

Rhoden, A. (Author & Presenter), "A Globally Convergent Numerical Method Applied to Thermal Tomography," Joint Mathematics Meeting, AMS and MAA, New Orleans, LA. (January 2011).

Rhoden, A. (Author & Presenter), "Research Mathematics for Ninth Graders," Conference for the Advancement of Mathematics Teaching, the Texas Council of Teachers of Mathematics, the Texas Association of Supervisors of Mathematics, and the Texas Section of the Mathematical Association of America, San Antonio, TX. (July 2010).

Rhoden, A. (Author & Presenter), "Poster Presentation for the Advancement of UTA's GK-12 Program," AAAS Meeting, AAAS, San Diego, CA. (February 2010).

Rhoden, A. (Author & Presenter), "A Forward Model of the Heat Equation based on Medical Experiments," Southwest Regional Conference for GK-12, National Science Foundation, Fort Worth, TX. (November 2009).

Scholarly and Creative Awards and Honors

Outstanding Graduate Research, University of Texas at Arlington. (2013).

SERVICE

Department

Coordinator, Problem of the Month. (September 2016 - May 2017).
Faculty Mentor, Math Club. (August 2015 - May 2017).
Faculty Advisor, TA Supervisor. (August 2015 - May 2017).
Faculty Mentor, Fishing Hatchery Visit. (February 2017).
Attendee, Meeting, Islander Day. (February 2017).
Student Placement, Teaching Assistant Orientation. (August 2016).
Committee Member, Lecturer Hiring Committee. (April 2016 - June 2016).
Attendee, Meeting, Islander Day. (February 2016).
Faculty Mentor, Coaching the Calculus Bowl Team. (March 2015 - December 2015).
Attendee, Meeting, Islander Day. (November 2015).
Supervisor. (August 2014 - May 2015).
Attendee, Meeting, Island Day. (April 2015).
Organized Teaching Assistant Observations. (October 2014 - November 2014).
Capstone Scoring. (October 2014).
Attendee, Meeting, Calculus 2 labs. (August 2014 - October 2014).

College

Committee Member, Teaching Assistant Assignment Committee. (August 2016 - August 2017).
Faculty Advisor, CASA Meeting. (February 2016).

University

Attendee, Graduation, Commencement. (December 2016).
Attendee, Convocation. (August 2016).
Judge, Pathways. (October 2015).
Attendee, Convocation, Convocation. (August 2015).

Public

Attendee, Meeting, Math Circles. (August 2014 - December 2014).