| Year | First Name | Last Name | Title | Advisor |
| :---: | :---: | :---: | :---: | :---: |
| 2023 | Alexis | Cordova | The Complex Relationships Between Mathematician's Religious Beliefs and Their Mathematical Ideas: Historical Snapshots | Cynthia Taylor |
| 2023 | Collin | Hood | Divisibility Tests in Different Number Systems and Their Applications | Zhigang Han |
| 2023 | Paul | Lipinski | Linking Classical and Transformational Geometry | Zhigang Han |
| 2023 | Michael | McCloud | A Survey of the History of Integral Calculus from Archimedes to Riemann | Noel Heitmann |
| 2022 | Samantha | Berdel | Teaching Math with Creative Writing in Middle and Secondary Schools | Caleb Corkery \& Janet White |
| 2022 | Brian | Fodale | Changes and Perceptions Experienced by Secondary-Level Mathematics Teachers during the COVID-19 Pandemic | Erin Moss |
| 2022 | Kelsey | Heckert | Factor Analysis: A Comparison of Two Statistical Packages | Kevin Robinson |
| 2022 | Hannah | Miller | Using Games as an Educational Resource to Teach Mathematics | Janet White |
| 2022 | Sara | Stinchcomb | Mathematical Models for White-Tailed Deer Populations Incorporating Annual Harvest | Baoling Ma |
| 2021 | Katherine | Pheysey | Comparison of Three Imputation Methods on a CDC COVID-19 Case Surveillance Database | James Fenwick |
| 2020 | Alyssa | Ames | Instructional strategies mathematics classroom teachers use to intrinsically motivate secondary school students | Cynthia Taylor |
| 2020 | Madison | Martin | Transfer Functions within Time Series Analysis | James Fenwick |
| 2020 | Annie | Tepe | A Historical Analysis of the St. Petersburg Paradox | Kevin Robinson |
| 2019 | Susan | Lloyd | Combining Cluster Analysis and Discriminant Analysis into an Integrated Approach to Analyze Data | James Fenwick |
| 2019 | Megan | McGee | Quantifying the Recovery of the Active Nesting Bald Eagle (Haliaeetus leucocephalus) Population in New Jersey | Baoling Ma |
| 2019 | Noelle | Shellenberger | Classical and Transformational Approaches to Triangle Center Theoroms and Its Implication in Geometry Education | Zhigang Han |
| 2019 | Jamie | Wittick | A Comparison of Mathematics Textbooks from 1833 to 2015 | Cynthia Taylor |
| 2018 | Brooke | Dobbs | Women Authors of Mathematics Textbooks | Dorothee Blum |
| 2018 | Joshua | Larson | Periodic Orbits on a Regular Hexagon | Zhigang Han |
| 2017 | Jessica L. | Butts | Comparison of Principal Components Analysis and Canonical Correlation Analysis | Kevin Robinson |
| 2017 | Krista | Mamet | Life Table Modeling and Its Uses in Actuarial Science | Kevin Robinson |
| 2017 | Quinn | Minnich | An $\mathrm{A}_{\infty}$ coalgebra Structure on the Cellular Chains of a Polygon | Ronald Umble |
| 2017 | Jack | Warner | Structured mathematical models to investigate the interactions between Plasmodium falciparum malaria parasites and host immune response | Baoling Ma |
| 2016 | Mervin | Fansler | Computational Application of the Transfer Algorithm to Borromean Rings | Ronald Umble |
| 2016 | Taylor | Lagler | The Effect of Covariance Matrices on Classification Procedures in Discriminant Analysis | James Fenwick |


| 2015 | Benjamin R. | Baer | Topics in Time Series Analysis with a Focus on Transfer | James Fenwick |
| :---: | :---: | :---: | :---: | :---: |
| 2015 | Nicholas | Heil | Ethnomathematics: Maya Vigesimal and Chronological Mathematical Systems | Ximena Catepillan \& Cynthia Taylor |
| 2015 | Ann | Kovacs | A Comparison of Parametric vs. Nonparametric Estimation of Survival Curves | Delray Schultz |
| 2015 | Jing | Li | Square of a Connected Quasi Claw-free Graph | Mingquan Zhan |
| 2015 | Christopher | Schneider | Generating Box-Jenkins ARIMA Date in JAVA , with a Concentration on | James Fenwick |
| 2014 | Jacob J. | Hike | Modeling Optimal Takeoff | J. Robert Buchanan |
| 2014 | Chelsea <br> Anne | Leber | Perspectives on Women in Mathematics: Past, Present and Future | Dorothee Blum |
| 2014 | Shaina | Smolowe | The Search for the Quadratic Formula | Dorothee Blum |
| 2013 | Timothy | Guy | Technology and the Evolution of Mathematics Education | Janet White |
| 2012 | Matthew J. | Keefe | Multidimensional Scaling: Mathematics Course Comparison and Zooplankton Abundance J. Fenwick | James Fenwick |
| 2012 | Anthony | Mastriania IV | Resolution Graphs and Splice Diagram for Certain Surface Singularities | Elizabeth Sell |
| 2012 | Patrick | Owens | Unification Problems on the Advanced Placement Calculus AB Exam | Dorothee Blum |
| 2012 | David | Paules | Fibonacci Numbers | Bruce Ikenaga |
| 2011 | Katelyn | Coleman | Math Teaching Strategies for Algebra | Janet White |
| 2011 | Stephanie | Coleman | The Dependency of Students and Teachers on Calculators in the Classroom | Janet White |
| 2011 | Michelle C. | De Stefano | Math Anxiety in College Algebra Students | Michael Wismer |
| 2011 | Andrew | Gehman | Discriminant Models in Graduation Prediction and Amblyopia Referral | James Fenwick |
| 2011 | James | Patounas | Solutions to the Beam Equation and Applications of Control Methods | J. Robert Buchanan |
| 2011 | Morgan | Schreffler | Fixed Point Theorems in Topology and Geometry | Ronald Umble |
| 2010 | Osman | Chaudhary | The 3-Body Problem and Saturn's Rings | J. Robert Buchanan |
| 2010 | Steven M. | McClure | A Stochastic Model of a Flour Beetle Ecosystem | J. Robert Buchanan |
| 2010 | April | Stump | Word Problems as a Reflection of Culture | Dorothee Blum |
| 2009 | Catherine | Albright | Time Series Analysis: Seasonally and Intervention Analysis using R | James Fenwick |
| 2009 | Katy | Lightner | Visual Displays of Statistics: Teaching Students about Spread Using Graphs and Technology | Kevin Robinson |
| 2009 | Jared L. | Martin | Effectiveness of Preliminary Tests of Variance for Two Sample T-Tests | Lewis Shoemaker |
| 2008 | Nicholas D. | Brubaker | Numerical Approximations of Center Manifolds | Zhoude Shao |
| 2008 | Sean M. | Evans | 2-In / 3-Out $\mathrm{A}_{\infty}$ - Bialgebras | Ronald Umble |
| 2008 | Daniel E. | Kravatz, Jr. | Diagonal Approximations on an n-gon and the Cohomology Ring of Closed Compact Orientable Surfaces | Ronald Umble |


| 2008 | Sherry B. | Linn | Cardiac Arrhythmias and the FitzHugh-Nagumo Model | J. Robert Buchanan |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | Nicole | Laros | Equitable Circular Labelings of Graphs | Dorothee Blum |
| 2006 | John A. | Gemmer | Generalizations of the Brachistochrone Problem | Michael Nolan |
| 2006 | Stephanie | Good | A Study of a Selection of Algebra I and Algebra II Textbooks Before and After the 1989 NCTM Standards | Dorothee Blum |
| 2005 | Andrew | Baxter | Periodic Orbits on a Triangular Air Hockey Table | Ronald Umble |
| 2005 | Michael | Cherrybon | Time Series Analysis: Utilizing the Box-Jenkins Procedure for Analyzing Economic Data | James Fenwick |
| 2005 | Sean M. | Laverty | A Habitat Suitability Model for Crayfish Species I Lancaster County, Pennsylvania, Streams | J. Robert Buchanan |
| 2005 | Joel M. | Martin | Log-Linear Models and an Analysis of the Pennsylvania Department of Education High School Mathematics Field Test | James Fenwick |
| 2005 | Stephen J. | Weaver | Computing the Saneblidze-Umble Diagonal on Permutahedra | Ronald Umble |
| 2004 | Shannon | Boyle | Teaching Styles and the van Heile Levels: An Analysis of the Effects of Two Teaching Styles on Student Learning | Janet White |
| 2003 | Michael | Dalmati | Comparison of Non-Parametric Survival Estimates between Full and Reduced Sample Sizes | Delray Schultz |
| 2002 | Heather | Heston | Möbius Transformations and Their Isometric Circles | Ximena Catepillan |
| 2002 | Joel B. | Mohler | Distance Minimizing Paths on Certain Simple Flat Surfaces with Singularities | Ronald Umble |
| 2002 | Ellen | Panofsky | Raising Lower Bounds for the Circularity of Circulant Graphs | Dorothee Blum |
| 2002 | Rebecca | Wentz | Mathematical Models of Predator-Prey Interactions | J. Robert Buchanan |
| 2000 | Melinda | Moyer | Time Series Analysis of State System of Higher Education Historical Enrollment | James Fenwick |
| 1997 | Margaret E. | Brousil | Simulations of Diurnal Circulations using a Two-Dimensional Mesoscale Numerical Model | Richard Clark \& J. Robert Buchanan |
| 1997 | Melissa | Courtade | A Time Series Approach for Testing Casuality Relationships of Inflation | James Fenwick |
| 1996 | Sheila D. | Haller | The Ornamental Groups of the Plane | Ronald Umble |
| 1995 | Christine | Ely | A Mathematical Analysis of Acoustic Wave Scattering | Robert Smith |
| 1995 | Denise | Grittner | The Equitable Chromatic Number of a Bipartite Graph | Dorothee Blum |
| 1995 | Keith E. | Mellinger | Rings with Involution | Hisa Tsutsui |
| 1994 | Jennifer | Fritz | Developing Problem Solving Skills in Today's Students: A Necessity for the Future | Bernie Schroeder |
| 1991 | Susan | Raught | The Angle Trisection Problem | Ronald Umble |
| 1990 | Robin M. | Wert | An Investigation of the Errors Involved in Numerical Solutions to Differential Equations | Robert Smith |
| 1987 | Dean | Balach | Simplicial Homology | Ronald Umble |
| 1987 | Cynthia | Cuddy | Balloons and Other Surfaces: The Euler Characteristic and Simplicial Homology | Ronald Umble |

