Texas State Vita: Dr. Michael Hilgemann

I. Academic/Professional Background

A. Name: Michael Hilgemann

Title: Assistant Professor of Instruction

B. **Educational Background**

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
Bachelor of Science	2005	Minnesota State University, Mankato	Mathematics Minors in Astronomy and Statistics	
Ph.D.	2010	Iowa State University	Mathematics	*On finite-dimensional Hopf algebras and their classifications*

C. **University Experience**

Position	*University*	*Dates*
Assistant Professor of Instruction	Texas State University	August 2026 – present
Professor of Mathematics	Dalton State College	May 2022 – May 2026
Associate Professor of Mathematics	Dalton State College	May 2015 – May 2022
Assistant Professor of Mathematics	Dalton State College	August 2010 – May 2015
Graduate Teaching Assistant	Iowa State University	August 2005 – May 2010

II. TEACHING

A. **Teaching Honors and Awards:**

Faculty Award for Excellence in Teaching, Dalton State College, Spring 2018

Graduate College Teaching Excellence Award, Iowa State University, Spring 2008

B. **Courses Taught:**

Texas State University (August 2026 – present):
- Calculus 1
- Calculus 3

Dalton State College (August 2010 – May 2026):
- Learning Support Mathematics
- Introduction to Mathematical Modeling
- College Algebra
- Precalculus
- Elementary Statistics
- Applied Calculus
- Calculus I
- Calculus II
- Calculus III
- Introduction to Linear Algebra
- Linear Algebra
- Introduction to Number Theory
- History of Mathematics
- Abstract Algebra I
- Abstract Algebra II
- Special Topics
- Research in Mathematics

Iowa State University (August 2005 – May 2010):
- High School Mathematics
- Applied Calculus
- Calculus I
- Calculus II
- Calculus III
- Ordinary Differential Equations

C. **Directed Student Learning**:

Undergraduate Research Projects Advised
- Dalton State College, Spring 2025: Investigating Quaternionic Matrices, one Mathematics major
- Dalton State College, Spring 2021: Moufang Loops and Vector Matrices, one Mathematics major

- Dalton State College, Spring 2018: Factorizations Involving the Quaternion Group, one Mathematics major

D. **Teaching Grants and Contracts**

1. Funded External Teaching Grants and Contracts:

2. Submitted, but not Funded, External Teaching Grants and Contracts:

3. Funded Internal Teaching Grants and Contracts:

Title III HSI STEM Grant, Dalton State College, Undergraduate Research Project (with Kevin Jones), Spring 2025

4. Submitted, but not Funded, Internal Teaching Grants and Contracts:

E. **Teaching Professional Development Activities Attended**

Faculty and Staff Book Group on "Relationship-Rich Education" by Peter Felten and Leo Lambert, Dalton State College, Fall 2025

Faculty Learning Community on the Scholarship of Teaching & Learning, Dalton State College, Fall 2024-Spring 2025

CETL Workshop "Ungrading," Dalton State College, February 2023

CETL Workshop "Creating Empathetic and Equitable Syllabus Policies," Dalton State College, February 2023

Faculty Learning Community on Teaching in '21, Dalton State College, Spring 2021

Faculty Learning Community on Transparency in Learning and Teaching, Dalton State College, Spring 2020

Workshop on "New Ed Tech Tools," Dalton State College, February 2018

Workshop on "High Impact Practices," Dalton State College, September 2016

Workshop on "Teaching Underprepared Students," Dalton State College, September 2015

Faculty Book Group on "Teaching at Its Best" Dalton State College, Fall 2015

Workshop on "Academic Excellence through Active Learning, Assessment, and Inclusive Teaching," Dalton State College, March 2015

Workshop on "Brain-Based Learning: Making the Right Connections," Dalton State College, May 2013

Workshop on "Retaining Your Students," Dalton State College, February 2013

Workshop on "Helping Students Transition from High School Learning Environments to College", Dalton State College, August 2012

Leadership Team Member, Center for Academic Excellence, Dalton State College, Summer 2012 – Spring 2013

Workshop on "Course Redesign," Dalton State College, January 2012

Leadership Team Member, Course Redesign Initiative, Dalton State College, Fall 2011 – Spring 2012

Co-Leader, Faculty Book Group on "Developing Learner-Centered Teaching" by Phyllis Blumberg, Dalton State College, Fall 2011

III. SCHOLARLY/CREATIVE

A. **Works in Print**:

1. Books:

a. Scholarly Monographs:

b. Textbooks:

Dalton State College APEX Calculus, with Tom Gonzalez and Jason Schmurr (2018). Round Six ALG Textbook Transformation Grant, Creative Commons Attribution - Noncommercial-Share Alike 4.0 License

c. Edited Books:

d. Chapters in Books:

e. Creative Books:

2. Articles:

a. Refereed Journal Articles:

b. Non-refereed Articles:

3. Conference Proceedings:

a. Refereed Conference Proceedings:

b. Non-refereed:

B. **Works Not in Print:**

1. Papers Presented at Professional Meetings:

2. Invited Talks, Lectures, and Presentations:

3. Consultancies:

4. Workshops:

5. Other Works not in Print:

a. Works "submitted" or "under review":

b. Works "in progress":

c. Other Works Not in Print:

C. **Scholarly / Creative Grants and Contracts:**

1. Funded External Grants and Contracts:

2. Submitted, but not Funded, External Grants and Contracts:

3. Funded Internal Grants and Contracts:

4. Submitted, but not Funded, Internal Grants and Contracts:

D. **Scholarly / Creative Fellowships, Awards, Honors:**

E. **Scholarly / Creative Professional Development Activities Attended:**

Presentation, “Can ChatGPT Write Mathematical Proofs?”, Mathematics Colloquium, Dalton State College, March 2023

Presentation, “Specifications Grading in Mathematics”, Mathematics Colloquium, Dalton State College, March 2021

Presentation, “TILTing Assignments”, Mathematics Colloquium, Dalton State College, October 2020

Panel Presentation, “New Faculty Orientation Faculty Panel”, Dalton State College, August 2019

Presentation, “DSC Calculus Textbook Transformation”, with Tom Gonzalez, Mathematics Colloquium, Dalton State College, April 2018

Presentation, “Generalizing Groups”, Mathematics Colloquium, Dalton State College, April 2016

Panel Presentation, “Graduate School in Mathematics”, Math Club meeting, Dalton State College, November 2014

Conference Presentation, “Co-Curricular Model for Learning Support at Dalton State College”, with Jason Schmurr, Georgia Association for Developmental Education Drive-In Conference, Middle Georgia State College, April 2014

Panel Presentation, “First Day Activities”, Fall Faculty Retreat, Dalton State College, August 2013

Presentation, “The Yang-Baxter Equation and Hopf Algebras”, Mathematics Colloquium, Dalton State College, March 2013

Conference Panel Presentation, “Technology Usage in the Collegiate STEM Classroom”, DSC Teaching and Learning Conference, Dalton State College, March 2013

Panel Presentation, “Course Redesign”, Fall Faculty Retreat, Dalton State College, August 2011

Presentation, “Hopf Algebras as Generalizations of Groups”, Mathematics Colloquium, Dalton State College, March 2011

IV. SERVICE

A. **Institutional**

1. University:

   Faculty Senator, Dalton State College, Fall 2018 – Spring 2021

   Faculty Senator, Dalton State College, Fall 2012 – Spring 2014

   Promotion and Tenure Committee, Dalton State College, Fall 2022 – Spring 2025

   Academic Programs Committee, Dalton State College, Fall 2020 – Summer 2021

   Honors Program Council, Dalton State College, Fall 2018 – Spring 2026

   General Education Branding Committee, Dalton State College, Spring 2023 – Spring 2024

Faculty Advisor, Delta Chi Fraternity, Dalton State College, Fall 2015 – Spring 2018

Faculty Representative, Student Advisory Committee, Dalton State College, Fall 2013 – Spring 2014

Reviewer, Dalton State College Foundation Scholarship Applications, Spring 2020 – Spring 2026

2. College:

STEM Undergraduate Research Committee, Dalton State College, Fall 2019 – Spring 2026

Science, Technology, and Mathematics Policies and Procedures Committee, Dalton State College, Fall 2012 – Spring 2018 (Chair: Fall 2013 – Spring 2018)

3. Department/School:

Faculty Search Committee Chair, Department of Technology and Mathematics, Dalton State College, Spring 2017

Faculty Search Committee Member, Department of Technology and Mathematics, Dalton State College,

Biology Faculty Search Committee, Spring 2023
Mathematics Faculty Search Committee, Spring 2020
Mathematics Faculty Search Committee, Spring 2017
Mathematics Faculty Search Committee, Spring 2016
Mathematics Faculty Search Committee, Spring 2014
Dean of School of Education Search Committee, Spring 2011

Faculty Review Committee Member, Dalton State College

Chair of Promotion Review Committee, Mathematics Faculty, Fall 2025
Pre-Tenure Review Committee, Physics Faculty, Fall 2025
Pre-Tenure Review Committee, Biology Faculty, Fall 2025
Promotion Review Committee, Physics Faculty, Fall 2022
Chair of Post-Tenure Review Committee, Mathematics Faculty, Fall 2022
Pre-Tenure Review Committee, Mathematics Faculty, Fall 2022
Post-Tenure Review Committee, Biology Faculty, Fall 2021
Tenure Review Committee, Mathematics Faculty, Fall 2019
Chair of Pre-Tenure Review Committee, Mathematics Faculty, Fall 2019
Promotion Review Committee, Mathematics Faculty, Fall 2018
Pre-Tenure Review Committee, Biology Faculty, Spring 2017
Pre-Tenure Review Committee, Mathematics Faculty, Fall 2016

Mathematics Awards Organizer, Department of Technology and Mathematics, Dalton State College, Spring 2017 – Spring 2026

Mathematics Capstone Committee, Department of Technology and Mathematics, Dalton State College, Spring 2025

New Faculty Mentor, Department of Technology and Mathematics, Dalton State College
Mathematics Faculty, Fall 2017 – Spring 2018
Mathematics Faculty, Fall 2016 – Spring 2017
Mathematics Faculty, Fall 2014 – Spring 2015

B. **Professional:**

C. **Community:**

High School outreach, Calhoun High School, representing Dalton State College, October 2011

D. **Organization Memberships:**

Member, American Mathematical Society, Fall 2005 – present
Member, Mathematical Association of America, Fall 2005 - present

E. **Service Honors and Awards:**

F. **Service Grants and Contracts:**

1. Funded External Service Grants and Contracts:

2. Submitted, but not Funded, External Service Grants and Contracts:

3. Funded Internal Service Grants and Contracts:

4. Submitted, but not Funded, Internal Service Grants and Contracts:

G. **Service Professional Development Activities Attended:**