# Craig Stuart McCarron, Ph.D. Instructional Assistant Professor Texas A&M University – San Antonio

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#### **Education**

Ph.D. Mathematics Education, Teachers College, Columbia University, 2011.

Dissertation: Comparing the Effects of Metacognitive Prompts and Contrasting Cases on Transfer in Solving Algebra Problems

Ed.M. Math and Science Education, Harvard Graduate School of Education, 1991.

A.B. Mathematics, Princeton University, 1984.

Senior Thesis: Analysis of Cellular Automata

#### **Teaching Experience**

- Instructional Assistant Professor, Texas A&M University San Antonio (2023 present), San Antonio, Texas.
- Mathematics Teacher, Medina Valley High School (2021 2023) Castroville, Texas.
- Associate Professor, University of the Incarnate Word (2012 2021), San Antonio, Texas.
- Assistant Professor, Texas Tech University (2010 2012), Lubbock, Texas.
- Mathematics and Science Teacher, Duneland Alternative Learning Center (2009), Chesterton, Indiana.
- Adjunct Mathematics Instructor, Texas A&M University Corpus Christi (2008), Corpus Christi, Texas.
- Adjunct Instructor, Teachers College, Columbia University (2007), New York, New York.
- Graduate Teaching Assistant, Teachers College, Columbia University (2005 2006), New York, New York.
- Adjunct Instructor, Fashion Institute of Technology, State University of New York (2005), New York, New York.
- Mathematics Instructor, University of Southern Indiana (1996 2005), Evansville, Indiana.
- Head Swimming Coach, Valparaiso and Mount Vernon, Indiana (1991 1996).
- Mathematics Teacher, Valparaiso High School (1991 1994), Valparaiso, Indiana.

#### Professional Experience: United States Army Officer 1984 – 1990

- Rose from Second Lieutenant to Captain
- Commanded units up to 130 personnel
- Responsible for care of equipment as much as \$100M
- Responsible for annual budgets as high as \$6M

# Teaching in Detail: Courses Taught Medina Valley High School: 2021-present

Courses Taught:

- Dual Credit MATH 1314 College Algebra
- Dual Credit MATH 1342 Elementary Statistics
- College Prep Mathematics

## **University of the Incarnate Word: 2012-2021**

Courses Taught:

- College Algebra
- Finite Mathematics (Liberal Arts alternative to College Algebra)
- Precalculus
- Linear Algebra
- Mathematics for Elementary Teachers I and II
- Integrated Mathematics and Science Pedagogy for Elementary Teachers
- Physical Science for Elementary Teachers
- Geometry and Proofs
- Mathematics Content and Pedagogy, K-5 (graduate)
- Integrated Mathematics and Science Pedagogy, K-5 (graduate)
- Discrete Mathematics
- Abstract Algebra
- Introduction to Number Theory

#### **Texas Tech University: 2010-2012**

Courses Taught:

- Middle Level Integrated Mathematics and Science Methods
- Secondary Curriculum Planning, Development, and Evaluation
- Secondary Instructional Methods

#### **Teachers College, Columbia University: 2005-2007**

Courses Assisted:

- Discrete Dynamical Systems Professor Henry Pollak
- Linear Models and Experimental Design Professor James Corter
- Mathematics Teaching and Learning Professor Bruce Vogeli

#### Course Taught:

• Linear Models and Experimental Design

#### Fashion Institute of Technology, State University of New York: 2005

Courses Taught:

- Geometry and the Art of Design
- Mathematical Ideas

## Texas A&M University - Corpus Christi: 2008

Course Taught:

Calculus I

### University of Southern Indiana, Evansville, Indiana: 1996 – 2005

Courses Taught:

- Intermediate Algebra
- Survey of Mathematics
- College Algebra
- Trigonometry
- Precalculus
- Computer Science for Teachers
- Calculus I

#### **Scholarly Contributions**

- McCarron, C. S., & Baker, J. (2019). Mechanics of Large Assessments: What We Wish We'd Known Five Years Ago. *SACSCOC Annual Meeting*.
- McCarron, C. S., Baker, J., & Ku, W. (2018). Managing Large Assessments: What We Wish We'd Known Four Years Ago. *The Southern Association of Colleges and Schools Commission on Colleges Annual Meeting.*
- Casola, P. A., & McCarron, C. S. (2017). A Comparison of Belgian and Texan Elementary School Mathematics and Science. *UIW Research Symposium, Poster Session*.
- McCarron, C. S., Stampfl, T., & Hall, S. (2016). Building Faculty Engagement in the QEP Using a Research Muse. *SACSCOC Annual Meeting*.
- McCarron, C. S. (2014). The Effect of Contrasting Examples on Transfer in Algebra Problem Solving. *UIW Research Symposium, Poster Session*.
- McCarron, C. S., Tek, S., & Ku, W. (2020). *Teaching Remotely with Zoom.* Center for Teaching and Learning Workshop, San Antonio, Texas.
- McCarron, C. S. & Ku, W. (2018). *Discuss a Journal Article in depth*. Invited presentation at Center for Teaching and Learning Workshop, San Antonio, Texas.
- McCarron, C. S., Tek, S., & Beltrami, J. (2017). *They Should Already Know That: The Puzzle of Transfer*. Invited presentation at Center for Teaching and Learning Workshop, San Antonio, Texas.
- McCarron, C. S. (2016). *What's the Point of PowerPoint?* Invited presentation at Center for Teaching and Learning Workshop, San Antonio, Texas.
- Partridge, T., Hall, S., & McCarron, C. S. (2016, August). *Questions in the Classroom.* Invited presentation at UIW Part-Time Faculty Workshop, San Antonio, Texas.
- McCarron, C. S. (2001). *Teaching Technical Reading Skills*. Southwest Indiana Council of Teachers of Mathematics, Evansville, Indiana.

- McCarron, C. S. (1999). *Using the Internet for Mathematics Enrichment*. Southwest Indiana Council of Teachers of Mathematics, Evansville, Indiana.
- McCarron, C. S. (1998). *Getting Students to Participate in Mathematics*. Southwest Indiana Council of Teachers of Mathematics, Evansville, Indiana.
- McCarron, C. (2007). *Geometry and Measurement. Houghton-Mifflin Mathematics, Grade 1*. Boston: Houghton-Mifflin Company.
- McCarron, C. (2007). *Geometry and Measurement. Professional Development Handbook Grade 1.* Boston: Houghton-Mifflin Company.
- McCarron, C. (2012). Applied Cognitive Science: Mentoring through scaffolds. S. Myers & Anderson, C. (Eds.), Dimensions in Mentoring. Rotterdam: Sense Publishers.
- McCarron, C. S. & Partridge, T. T. (2018). *Enhance Student Learning Using Frequent Low-Stakes Assessments*. Lilly Conference, Austin, Texas.
- Stampfl, T., Hall, S., & McCarron, C. S. (2017). Successfully Tackling Writing in Business and the Sciences. Lilly Conference, Austin, Texas.
- Mallen, V. & McCarron, C. S. (2019). *The High School Discrete Mathematics Course: Teaching the Graph Theory Unit.* Conference for the Advancement of Mathematics Teaching (CAMT) 2019, San Antonio, Texas.
- McCarron, C. S. & Tek, S. (2019). *How Will our Graduates Teach High School Mathematics Electives?* Conference for the Advancement of Mathematics Teaching (CAMT) 2019, San Antonio, Texas.
- McCarron, C. S., Garcia, R., Mallory, D., & Smith, B. (2018). *Build a Scale Model of the Solar System*. Conference for the Advancement of Mathematics Teaching (CAMT), Houston, United States of America.
- McCarron, C. S. & Horner, H. (2017). When to Put the Manipulatives Away. Conference for the Advancement of Mathematics Teaching (CAMT), Ft. Worth, Texas.
- Garcia-Wukovits, F. & McCarron, C. S. (2016, July). Fun With Polar Equations. Conference for the Advancement of Mathematics Teaching (CAMT), San Antonio, Texas.
- McCarron, C. S. (2015). How to make and use Base Five Blocks for elementary teacher preparation. Texas Section Meeting of the Mathematical Association of America, San Antonio, Texas.
- McCarron, C. S. (2014). A Hatful of Mathematics Enrichment Activities. Conference for the Advancement of Mathematics Teaching (CAMT), Fort Worth, Texas.

#### Honors/Awards

- 2020: School of Mathematics, Science, and Engineering Award for Teaching Excellence, University of the Incarnate Word.
- 2016: Mother Columkille Colbert Award for Service, University of the Incarnate Word.
- 2001: H. Lee Cooper Core Curriculum Teaching Award, University of Southern Indiana.
- 1996: Southwest Indiana Swim Conference Coach of the Year, Mount Vernon, Indiana.
- 1990: Army Medals for Exceptional Performance, U.S. Army.
- 1984: John Alan Swabey Memorial Trophy, Princeton University Swimming Team.