

Curriculum Vitae

Laurie P. Walker, M.S.

139 Albion Road · Searcy, AR 72143

Home: 501-593-5168 · Office: 501-279-5283

Email: LWalker3@harding.edu

EDUCATION

- **M.S., Applied Mathematics**, Applied Field: Electrical Engineering, Florida Institute of Technology, Melbourne, FL, 1992
THESIS: *Use of Neural Networks for Predicting Grades in Calculus*: Advisor Dr. L.V. Fausett, Ph.D.
- **B.A., Mathematics**, Minor in Bible, Harding University, Searcy, AR, 1987

PROFESSIONAL AFFILIATIONS

- Charles A. Dana Center for Mathematics Pathways, 2017 – present
- National Council of Teacher of Mathematics, 1987 – 1992 & 2009 – present
- American Mathematical Association of Two-Year Colleges, 2011 – 2013
- Advisory Council on Military Education, 1992 – 1993
- National Science Foundation, 1989 – 1990

TEACHING

ASSISTANT PROFESSOR, Harding University, Searcy, AR 2006 – present

- Develop lesson plans and teach classes in Calculus I and Calculus II to approximately 70 undergraduate students per year pursuing degrees in STEM fields.
- Teach both online and on ground Elementary Statistics to approximately 250 undergraduate students per year pursuing degrees in primarily non-STEM fields.
- Direct research for math majors preparing their senior capstone presentations when needed.
- Created the online course in Elementary Statistics for undergraduate students to serve as a liberal arts mathematics course for various majors.
- Created the online course in Elementary Statistics for nursing majors who are pursuing a nursing degree through the ORBIS program in Northwest Arkansas.
- Initiated Intersession course offerings in Elementary Statistics.
- Meet with potential students and their families attending Bison Days and Black & Gold Days.
- Advise incoming mathematics students during Bison Bound and Impact as well as current students completing their degrees.

INSTRUCTOR, Georgia State University (Georgia Perimeter College), Atlanta, GA 1994 – 1995

- Developed lesson plans and taught classes in Developmental Mathematics at the Gwinnett Center to traditional students lacking the math skills necessary to enter college level math classes.
- Organized the Wellness Fair at the Gwinnett Center to encourage better health among the employees.

ADJUNCT PROFESSOR, Clayton State University, Morrow, GA, 1993 – 1994

- Developed lesson plans and taught day and evening classes in Earth Algebra, College Algebra, Pre-Calculus, and Business Calculus to non-traditional undergraduate students.

INSTRUCTOR, Eastern Florida State College (Brevard Community College), PAFB, FL, 1992 – 1993

- Developed lesson plans and taught classes in Developmental Math and College Algebra primarily to men and women serving in the military on Patrick Air Force Base.
- Aided in the establishment of dedicated classes and office space at the Air Force Base to accommodate students' needs for daytime classes.
- Established tutoring sessions for non-traditional students working toward their degrees while serving in the military.

GRADUATE STUDENT ASSISTANT, Florida Institute of Technology, Melbourne, FL, 1990 – 1992

- Developed lesson plans and taught incoming freshmen College Algebra and Pre-Calculus in stand-alone classes.
- Served as instructional support for Calculus I and II, meeting with small portions of the larger class twice weekly to facilitate their learning.
- Conducted research on Singular Sturm-Liouville problems involving the continuous spectrum under Dr. Charles Fulton.
- Conducted research on Neural Networks and their applications in education under Dr. Laurene Fausett.

SECONDARY MATHEMATICS TEACHER, Mars Hill Bible School, 1988 – 1990

- Developed lesson plans and taught classes in Pre-Algebra, Algebra I, Algebra II, and Physics to students in the 9th through 12th grades.
- Aided in the creation of the Math Team and sponsored them on trips to compete at the local, district, and state level.
- Organized the yearly trip to Physics Day at Six Flags over Georgia for qualifying physics students.
- Led women's worship during Life Day.
- Participated in annual fund raises such as the Labor Day Barbecue and Field Day.
- Sponsored the Anchor Club service organization and traveled with them to the Freedom Foundation at Valley Forge, Pennsylvania.

SECONDARY MATHEMATICS TEACHER, Harding Academy, Searcy, AR 1987 - 1988

- Developed lesson plans and taught classes in 7th Grade Math, Algebra, and Geometry to students in the 7th through 10th grades.
- Taught summer school classes in Algebra for students needing remediation.

- Coached the Junior High and Senior High Girls' Track Team.
- Coached the Senior High Girls' Softball Team.
- Sponsored Junior High and Senior High Cheerleaders for both Basketball and Football.
- Organized the summer cheerleading clinic for elementary aged girls as a fundraiser for cheerleading camp.

Scholarship

SCHOLARSHIP OF DISCOVERY: Hold membership and read journals from professional organizations, participate in online discussions, and submit papers or present at conferences as listed below:

- Walker, L.P. (2018, February). *The Miller Half Rule Extended and Updated*, Harding University, Searcy, AR
- Walker, L.P. & Priest, D.B. (2014). A Theoretical Look at Constructing Maximum-Minimum Problems with Convenient Answers. *MathAMATYC*, 5(2) 16-17.
- Priest, D.P. & Walker, L.P. (2014, November). *Constructing 3-D Max/Min Problems with Convenient Answers*. AMATYC Nashville, TN
- Duke, D.G., Priest, D. B. & Walker, L.P. (2014). Additional Insights into Derivative of Area Equals Perimeter Extended. *Mathematics Teacher*, 108(3), 164-165.
- Walker, L.P. & Priest, D. B. (2013). More on Derivative of Area Equals Perimeter – Coincidence or Rule? *Mathematics Teacher*, 107(5), 325.
- Walker, L.P. (2012, April). *The Miller Half Rule Extended*, Harding University, Searcy, AR
- Priest, D.B. & Walker, L.P., (2011). The Miller Half Rule Extended. *Mathematics Teacher*, 105(5) 329.

SCHOLARSHIP OF APPLICATION: Serve as an advisor and mentor to students who are preparing to teach mathematics, pursue graduate degrees, or enter into a career in math.

- Powers, Daniel (2019). *Secrets of Optimization*. Directed student research leading to a presentation in the area of maximization and minimization problems and ways in which to generate multiple problems for teachers or textbook companies to use.
- Keating, Elizabeth (2016). *The Game of Set*. Directed student research leading to a presentation on the probabilities in the game of set and moving it from the second to the third dimension.
- McMichael, Lance (2015). *Business Applications for Calculus*. Directed student research leading to a presentation on the many uses of math in the business world.
- Harrell, Alden (2015). *Geometric Calculation of Gabriel's Horn*. Directed student research leading to a presentation on the geometrical calculation of an improper integral with a finite solution.
- Jaynes, Lyndsey (2015). *Phi and the Golden Ratio*. Directed student research leading to a presentation on the calculation phi and applications of the golden ratio.
- Lowe, Daniel (2015). *Probabilities in Tennis*. Directed student research leading to a presentation on the calculation of probabilities in tennis.
- Dicken, Stacy (2014). *Discovering Pi*. Directed student research leading to a presentation on the history of the search for pi and the current status of decimals of pi.

SCHOLARSHIP OF TEACHING: Seek ways to utilize technology, improve the learning process, and lower cost both online and on ground for approximately 300 students a year.

- Restructure Math 1200 to align with the Arkansas Course Transfer System. 2022
- Created online course for International Programs students in Elementary Statistics using Quality Matters Lite Fundamental Design Principals. 2018
- Initiated offerings of online classes to local students to facilitate the diverse needs of students.
- Utilize WileyPlus and Pearson Webinars to learn techniques of integrating resources in the Canvas LMS in order to increase student ease of access and improve faculty efficiency.
- Researched multiple online proctoring systems to protect the integrity of testing in online courses and established the use of Proctorio Proctoring services.
- Received education to become proficient in the use of Respondus software, to have more control over test given through Respondus Lockdown Browser in the testing lab.

SCHOLARSHIP OF INTEGRATION: Routinely reach out to faculty and staff across the university to gain and share knowledge and experience.

- Collaborated with English and Interior Design faculty to prepare and present a Center for Teaching and Learning Workshop on *Assessing Creative Work*. (Feb. 2020)
- Work with staff in the Harding Bookstore and E-Learning Center to explore Direct Access options and serve as a testing ground for future classes. (2017 – present)
- Cooperate with advisors in Biology, Chemistry, Medical Humanities, Cognitive Neuroscience, and other fields to guide students pursuing careers in optometry. (2016 – present)
- Serve as a resource for McNair Scholars needing GRE tutoring or as a mathematical fact checker. (2013 – 2016)
- Mentor and supervise mathematics teachers who are pursuing the Master of Arts in Teaching for the Cannon-Clary College of Education.

SERVICE

STATE WIDE SERVICE: Arkansas Department of Higher Education

- Work on the Adult and Online Education Committee to better serve non-traditional students seeking education. 2024 – Present
- Serve on the *Dana Center Task Force* to implement Math Pathways in two-year and four-year institutions across Arkansas. 2016 – 2022
- Member of the Multiple Measures Steering Committee seeking alternate ways of accurately placing students into the correct math courses. 2017 – 2018

UNIVERSITY WIDE SERVICE: Harding University

- Member of the *Higher Learning Commission Criterion I Committee*. Updating the Mission Statement and gathering evidences of where it is communicated and practiced. 2022 – present
- Serve as Freshmen Chapel Group Leader in the “Creative Minority” reading group. Feb – Mar 2024.
- Chair of the *Faculty Annual Plan Evaluation Committee*. Simplified the FAPE process and implemented the new format. 2023 – 2024

- Member of the *Teacher Achievement Award Committee*. Worked to standardize and simplify the TAA selection process so as not to require work or self-promotion on the part of the nominee. 2023 – 2024
- Serve as a faculty representative during *New Faculty Orientation*. August 2023
- Serve on the *Faculty Evaluation Committee*. Developed an improved evaluation form for online teachers and began the pilot program. 2022 – 2024
- Chair of the *Faculty Evaluation Committee*. Led the team through the completion of the Alternate Peer Evaluation formation and began work on a new evaluation process for online teachers. 2021 – 2023
- Chair of the *Rank and Promotions Committee*. 2020 – 2021
- Member of the *Rank and Promotions Committee* to aid in the evaluation of faculty members who submit a request for promotion. 2019 – 2021
- Assisted in the creation of a webinar for faculty applying for promotion to educate and facilitate the application process. 2020
- Member of the *Faculty Welfare Committee* advocating for faculty and presenting faculty needs to the administration. 2019 – 2020

COLLEGE WIDE SERVICE: College of Arts and Sciences

- Participated in Cross-Discipline Education by preparing and presenting a demonstration for students in Family and Consumer Science. Feb 2024.
- Joined the Liberal Arts Reading Group to discuss the updates in the Liberal Arts programs and ways to keep it relevant for all disciplines as we renew and refresh our requirements. 2023 – 2024
- Work with ORBIS and the College of Nursing to create a 7-week pre-requisite statistics course. 2022
- Serve on the Inquiry, Investigation and Reason Working Group Committee to create alternate Liberal Arts pathways. 2021
- Work as a member of the Liberal Arts Renewal Group. 2021
- Act as a liaison between the College of Science and the Brackett Library as a member of the *Library Committee* presenting faculty needs to the library and insuring faculty awareness of services currently offered by the library. 2018 – present
- Advise and assist pre-professional Health Science students pursuing careers in optometry. 2015 – present.

DEPARTMENT WIDE SERVICE: Math Department

- Advise incoming freshmen during Bison Bound events in the summer.
- Prepare and present to Math 4400 on various topics as needed.
- Serve as a mentor to new full-time and adjunct members of the math faculty when needed enabling them to transition smoothly into the classroom.
- Research and select appropriate materials and platforms for use in the classroom and work with textbook companies to find the lowest cost options for the students.
- Aid in the planning, organizing, and celebrating of Pi Day when it occurs during the active term.
- Worked with faculty teaching the same course to develop and refine common course final exams in Statistics and College Algebra.

OTHER INSTITUTIONAL SERVICE

- “Next Gen – Conference on Youth Mental Health” in Atlanta, GA April 10-13, 2024
- “Arm & Arm Mentoring” training session preparing to mentoring small groups of women. Jan 2024
- Serve on a panel of women in STEM to speak in *Breakout Chapel*. April 2, 2023
- Prepare and present with a women’s choral group for the *Women of Faith Chapel*, August 30, 2023
- Member of the *Bison Bound Executive Committee*. 2022
- Sponsor *Sigma Phi Mu*, a Harding women’s social club. 2013 – present
- Created the *HU Pre-Optometry Club* and serve as the sponsor for all events to create a community of support for students pursuing this goal. 2019 – present.
- Served on the *Lectureship Planning Committee* to invite and introduce speakers for the textual track of the women’s program. 2016 – 2019
- Assisted the *Relay for Life* effort at Harding by organizing Sigma Phi Mu and Pre-Optometry booths to raise money for cancer research. 2019
- “The Parable of the Fig Tree” presented in the women’s track at Lectureship in 2016.
- “Who’s Flying the Plane?” presented in the WINGS conference in 2010.

COMMUNITY SERVICE

- Serve and mentor female college students in the *Heartfelt Ministry* at the College Church of Christ. 2023 – present.
- Work with the *Funeral Meals Committee* at the College Church of Christ organizing and serving meals for families who have experienced loss. 2019 – present.
- Volunteer at the *Friends For Life Crisis Pregnancy Center* in Searcy. 2021 - present
- Assist with hosting and teaching *Just Girls’ Devo* at the Original Rock House. 2019 – present
- Act as a Heart Mom in the *Heartfelt Ministry* program hosting meals and mentoring young mothers and young professionals. 2017 – 2020
- Lead a group of *Bisons for Christ* volunteers to serve the community each year. 2012 – 2019
- Aid in organization of nursery workers for area wide *Vacation Bible School*. 2017 – 2019
- Taught three-year-old *Bible class* at the College Church of Christ. 2007 – 2019
- Assisted the *Harding Academy track* coach with field events at home meets. 2017 – 2018
- Hosted *home Bible study* for college women on Wednesday evenings. 2016 – 2017
- Organized meals for the *Harding Academy Robotics Team* as an FRC volunteer. 2012 – 2014
- Volunteered as a qualified *Stroke and Turn Judge* for AAU swim meets. 2010 – 2013
- Worked on the *Curriculum Committee* for the College Church of Christ establishing the course of study for junior and senior high students. 2012
- Served as a *Camp Tahkodah Volunteer* teaching Bible classes and helping in the crafts. 2006
- Worked with the *Lads to Leaders* program at the Germantown Church of Christ, mentoring in the Song Leading, Puppets, Bible Bowl, and Good Samaritan programs in Germantown, TN. 2003 – 2006
- Taught cradle roll *Bible class* at the Germantown Church of Christ. 2001 – 2006
- Served as a *nursery worker and preschool teacher* for the North Atlanta Church of Christ in Atlanta, GA. 1994 – 1997
- Participated in a *mission trip to Georgetown, Guyana* working with the local church and teaching individual Bible lessons. 1993

- Taught cradle roll *Bible class* at the Melbourne Church of Christ in Melbourne, FL. 1990 – 1993
- Hosted weekly *home Bible study* for young married couples in Melbourne, FL. 1990 – 1993.
- Taught 4th grade *Bible class* at the Tuscumbia Church of Christ in Tuscumbia, AL. 1988 – 1990

ACADEMIC HONORS AND AWARDS

- Graduate Assistantship Award, Florida Institute of Technology, 1990 – 1992
- Graduated Summa Cum Laude, Florida Institute of Technology, 1992
- Graduated Magna Cum Laude, Harding University, 1987
- Alpha Chi National Honor Society, 1985 – 1987
- Timothy Edward Yates Academic Scholarship, 1986 – 1987
- Kenneth Rose Academic Scholarship, 1986 – 1987