

# AMY GRACE VAUGHAN

Associate Professor of Statistics  
Zimpleman College of Business  
Drake University  
amy.vaughan@drake.edu

## EDUCATION

UNIVERSITY OF GEORGIA  
**Ph.D. in Statistics**  
December 2009

ATHENS, GA

**Master of Science in Statistics**  
May 2006

GEORGIA SOUTHERN UNIVERSITY  
**Master of Business Administration**  
May 2001

STATESBORO, GA  
(Accredited by AACSB)

**Master of Sports Management**  
August 2001

MURRAY STATE UNIVERSITY  
**Honors Bachelor of Arts in Business Administration**  
May 1999

MURRAY, KY  
(Accredited by AACSB)

## WORK HISTORY

August 2009  
to present

Associate Professor of Statistics  
Drake University

Des Moines, IA

Teach Stat 71 and 72, covering central tendency and spread, confidence intervals, tests of significance, probability, binomial and normal distributions, analysis of variance, correlation, multiple regression, nonparametric tests, and contingency tables. Teach Stat 170 on advanced multiple regression, model goodness of fit, residual analysis, data transformations, time series, and ARMA models with programming in R. Teach Stat 170 on advanced multiple regression, model goodness of fit, residual analysis, data transformations, time series, and ARMA models with programming in R. Teach Stat 240 on advanced multiple regression, time series, and logistic regression with programming in R. Taught Stat 60 for Pharmacy majors, consisting of similar topics to Stat 71 with experimental design added. Taught MFM 212 on data analysis and decision-making consisting of time series, probability, probability distributions, sampling and estimation, hypothesis testing, and multiple regression.

July 2014 – 2016,  
2018-19, and 2021-25

Visiting Professor  
University of International Business and Economics

Beijing, China

Taught Applied Data Analysis for Numerous Data Types - Using Excel which covered multiple sample hypothesis testing on parametric and nonparametric datasets and multiple regression. Also taught Introductory Regression and Time Series - with R Programming which covered exploratory data analysis, advanced aspects of multiple regression, and time series concepts including ARMA models, all programmed in R software.

August 2007  
to May 2009

Graduate Assistant  
University of Georgia

Athens, GA

Conducted computer lab sessions and graded homework for courses covering experimental design, quality assurance, SAS programming, statistical consulting, generalized linear models, and regression estimation and inference methods.

August 2005  
to August 2007

Graduate Teaching Assistant  
University of Georgia

Athens, GA

Taught a statistical methods course consisting of one- and two-population tests about means, proportions, and variance; probability basics; contingency tables; goodness-of-fit tests; non-parametric tests; analysis of variance; simple experimental designs; linear regression and residual diagnostics.

Summer 2006  
to Summer 2016

Advanced Placement Exam Reader  
Educational Testing Services

Graded the free response section of the AP Statistics exam given to high school students.

January 2004  
to August 2005

Graduate Teaching Assistant  
University of Georgia

Athens, GA

Taught an introductory statistics course covering sampling methods, experiments, numerical and graphical descriptive methods, correlation and regression, contingency tables, probability concepts and distributions, confidence intervals, and hypothesis testing for means and proportions.

## **PUBLICATIONS**

Vaughan, Amy Grace and Finn, Daniel. (2025). Formative Assessment: Closing the Gap with Active Learning Quizzes. *Business Education Innovation Journal*, 17(1), 153-162.

Voorhees, Bret, Kannass, Kathleen, and Vaughan, Amy G. (2024). The Importance of Training to Manage a Church as a Predictor of Emotional Exhaustion and Ministry Satisfaction. *Journal of Pastoral Care & Counseling*, 78(3), 98-106.

Anderson, Jerry L. and Vaughan, Amy Grace. (2023). Environmental Penalties: Discretion and Disparity. *Stanford Environmental Law Journal*, 42(1), 1-58.

Huey, M., Silvey, P., Vaughan, A.G., and Fisher, A. (2022). Assessing the Impact of Standards-based Grading Policy Changes on Student Performance and Practice Work Completion in Secondary Mathematics. *Studies in Educational Evaluation*, 75, 101211, 1-10.

Mitchell, A. and Vaughan, A.G. (2022). Implementing Team-Based Learning: Findings From a Database Class. *Journal of Information Technology Education: Innovations in Practice*, 21, 1-23.

Staub, C.M., Vaughan, A.G., and Dorion, A. (2021). Framing women's roles in 20th century farming: A content analysis of cover images from Successful Farming and The Farm Journal. *The Journal of Magazine Media*, 21(2), 45-79.

- Kjos, A., Vaughan, A. and Bhargava, A. (2019). Impact of a Mobile App on Medication Adherence-Related Beliefs in Patients with Type 2 Diabetes. *The Journal of the American Pharmacists Association*, 59(2), S44-S51.
- Roberts, T., Johnson, J., and Vaughan, A. (2019). Canagliflozin in Type 1 Diabetes: A Case Series of Patient Outcomes in a Diabetes Clinic. *Diabetes Spectrum*, 32(1), 47-51.
- Wildermuth, C., Vaughan, A. and Cristo-Baker, E. (2013) A Path to Passion: Connecting Personality, Psychological Conditions, and Emotional Engagement. *Journal of Psychological Issues in Organizational Culture*, 3, 18-45.
- Bhargava, A., Gleason, S., Vaughan, A., Johnson, J., and Yarlalagadda, K. (2013) The Effect of Pioglitazone and Extended-Release Niacin on HDL-Cholesterol in Diabetes Patients in a Real-World Setting. *International Journal of Clinical Practice*, 67, 1151-1158.
- Houle, P., Reed, D., Vaughan, A. and Clayton, S. (2013) Using Laptop Computers in Class: A Student Motivation Perspective. *Journal of Learning in Higher Education*, 9, 83-92.
- Vaughan, A., Mikyoung, J., and Park, C. (2012). Statistical Inference and Visualization in Scale-Space for Spatially Dependent Images. *Journal of the Korean Statistical Society*, 41, 115-135.
- Litten, J., Vaughan, A., and Wildermuth, C. (2011). The Fabric of Engagement: The Engagement and Personality of Managers and Professionals in Human and Developmental Disability Services. *Journal of Social Work in Disability & Rehabilitation*, 10, 189-210.
- Park, C., Vaughan, A., Hannig, J., and Kang, K. (2009). SiZer Analysis for the Comparison of Time Series. *Journal of Statistical Planning and Inference*, 139, 3974-3988.

## **PRESENTATIONS**

- July 2025. 11<sup>th</sup> University of International Business and Economics International Affairs Summer Forum. Beijing, China.
- March 2016. Kjos, A. Vaughan, A. Bhargava, A. "Impact of Smart-Device Mobile Application on Medication Self-Management in Patients with Type 2 Diabetes." Poster presentation at the 163rd Annual Meeting of the American Pharmacists Association, Baltimore, Maryland.
- July 2015. 3<sup>rd</sup> University of International Business and Economics International Affairs Summer Forum. Beijing, China.
- July 2013. Impact of an Innovative, User-Centered Technology on Medication Self-Management. American Association of Colleges of Pharmacy Annual Meeting. Poster presented by coauthor Dr. Andrea Kjos. Chicago, IL.
- May 2013. Using Laptop Computers in Class: A Student Motivation Perspective. International Conference on Learning and Administration in Higher Education 2013. Nashville, TN.
- October 2010. SiZer Analysis for Time Series and Spatially Dependent Data. College of Business and Public Administration Research Colloquium. Drake University, Des Moines, IA.

October 2008. SiZer Analysis in Imaging Data. Network of Greater Georgia Institutions of Neuroimaging and Statistics (NOGGINS) Workshop. University of Georgia, Athens, GA.

## **AWARDS**

Social Impact Research Award. 2024. Drake University, Zimpleman College of Business.

Top 20 articles selected for the 2023 Environmental Law and Policy Annual Review. 2023. Environmental Law Institute's (ELI) Environmental Law Reporter and Vanderbilt University Law School.

David B. Lawrence Undergraduate Teacher of the Year Award, 2023 and 2015. Drake University, Zimpleman College of Business.

Presentation Excellence Award. May 2013. International Conference on Learning and Administration in Higher Education 2013. Nashville, TN.

Best Paper Award. May 2013. International Conference on Learning and Administration in Higher Education 2013. Nashville, TN.

## **COMPUTER SKILLS**

R, SAS, SPlus, Matlab, LaTeX, SPSS, AMOS, Microsoft Office, Windows 95, Blackboard, WebCt

## **SERVICE**

Faculty Search Committees

College of Business and Public Administration

Fall 2021 – Chaired search committee for tenure-track Assistant Professor of Statistics faculty position

Fall 2020 – Chaired search committee for Visiting Assistant Professor of Statistics faculty position

Fall 2016 – Member of search committee for tenure-track Assistant Professor of Business Analytics faculty position

Fall 2015 – Member of search committee for Assistant Professor of Practice of Statistics faculty position

Spring 2013 – Member of search committee for tenure-track Assistant Professor of Actuarial Science faculty position

Spring 2013 – Member of search committee for tenure-track Assistant Professor of Actuarial Science faculty position

Fall 2013 – Member of search committee for tenure-track Assistant Professor of Actuarial Science faculty position

Fall 2012 – Member of search committee for tenure-track Assistant Professor of Actuarial Science faculty position

Fall 2012 – Member of search committee for EMC Visiting Professor of Actuarial Science faculty position

Sigma Alpha Epsilon Faculty Advisor  
Drake University

August 2012 – present

Alpha Kappa Psi Faculty Advisor  
Zimpleman College of Business

August 2013 – present

Women's Club Volleyball Faculty Advisor

Drake University	August 2013 – present
Women in Business Faculty Advisor Zimpleman College of Business	August 2018 – present
Spikeball Club Faculty Advisor Drake University	January 2024 – present
Undergraduate Curriculum Redesign Committee College of Business and Public Administration	November 2017 – February 2019
Assessment Coordinator College of Business and Public Administration	Summer 2011 – December 2018
Drake Curriculum Analysis Committee (DCAC) Drake University	March 2013 – December 2018
Supervisor of Statistics Tutoring Lab College of Business and Public Administration	September 2010 – May 2016
Member of Undergraduate Curriculum Committee College of Business and Public Administration	September 2010 – May 2015
Member of Information Security Advisory Committee Drake University	December 2010 – May 2012
Coordinator of Departmental Research Colloquiums College of Business and Public Administration	October 2009 – May 2011