

## Brian Habing

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### Education

Ph.D. in Statistics, University of Illinois at Urbana-Champaign, 1998  
Dissertation: Some Issues in Weak Local Independence in Item Response Theory  
Advisor: Dr. William Stout

M.S. in Mathematics, University of Illinois at Urbana-Champaign, 1994

B.S. in Mathematics, University of Illinois at Urbana-Champaign, 1991  
Cum Laude with High Distinction

### Academic Positions

Senior Research Fellow and Associate Director for Education Activities and Research, National Institute of Statistical Sciences, 9/20 – present

Associate Professor (Tenured) - Department of Statistics, University of South Carolina, 8/04 – present  
Adjunct Associate Professor – Department of Educational Studies, 5/07 – present  
Adjunct Associate Professor – Experimental Psychology Program, 12/08 - 11/17.

Assistant Professor (Tenure Track) - Department of Statistics, University of South Carolina, 8/98 – 8/04

Graduate Fellow, Teaching Assistant, and Research Assistant - Department of Mathematics and Department of Statistics, University of Illinois at Urbana-Champaign, 8/91 - 8/98

### Research Interests

Psychometrics – Item Response Theory, Scale Construction, Multivariate Statistics, and Educational Measurement

### Articles in Print

Mo, Y., Habing, B., & Sedransk, N. (2022). Tree-based methods: A tool for modeling nonlinear complex relationships and generating new insights from data. *Journal of Data Science*, 3, 359-379.

Sherlock, P., DiStefano, C. & Habing, B. (2022). Effects of mixing weights and predictor distributions on regression mixture models. *Structural Equation Modeling: A Multidisciplinary Journal*, 29 (1), 70-85.

Donevant, S.B., Estrada, R.D., Culley, J.M., Habing, B., & Adams, S.A. (2018). Exploring app features with outcomes in mHealth studies involving chronic respiratory diseases, diabetes, and hypertension: a targeted exploration of the literature. *Journal of the American Medical Informatics Association*, 25 (8), 1407-1418.

Sherlock, P., Chezian, L.C., Wolfe, K., Drasgow, E., & Habing, B. (2018). Using linear mixed effects models: A single-case experimental design meta-analysis of functional communication training. *Evidence Based, Communications Assessment and Intervention*, 12, 31-53.

Li, T., Habing, B., & Roussos, L. (2017). Conditional covariance based subtest selection for polytomous DIMTEST. *Applied Psychological Measurement*, 41 (3), 209-226.

- Heiney, S.P., Gullatte, M., Hayne, P.D. Powe, B., & Habing, B. (2016). Fatalism revisited: Further psychometric testing across two studies. *Journal of Religion and Health*, 55 (4), 1472-1481.
- Deutsch, R., Habing, B. & Piegorsch, W.W. (2014). A PAV-algorithm approach to detect infinite parameter estimates in one-regressor dose-response models with asymptotes. *Journal of Statistical Computation and Simulation*, 84 (12) 2545-2556.
- Feng, Y., Habing, B., & Huebner, A. (2014). Parameter estimation of the reduced RUM using the EM algorithm. *Applied Psychological Measurement*, 38 (2), 137-150.
- Cacciola, J.S., Alterman, A.I., Habing, B., & McClellan, A.T. (2011). Recent status scores for version 6 of the Addiction Severity Index (ASI-6). *Addiction*, 106, 1588-1602.
- Deutsch, R.C., Grego, J.M., Habing, B., & Piegorsch, W.W. (2010). Maximum likelihood estimation with binary-data regression models: small-sample and large-sample features. *Advances and Applications in Statistics*, 14, 101-116.
- Alterman, A.I., Cacciola, J.S., Ivey, M.A., Coviello, D.M., Lynch, K.G., Dugosh, K.L., & Habing, B. (2010). Relationship of mental health and illness in substance abuse patients. *Personality and Individual Differences*, 49, 880-884.
- Alterman, A.I., Cacciola, J.S., Ivey, M.A., Habing, B. & Lynch, K.G. (2009). Reliability and validity of the alcohol short index of problems and a newly constructed drug short index of problems. *Journal of Studies on Alcohol and Drugs*. 70: 34-307.
- Froelich, A.G., & Habing, B. (2008). Conditional covariance based subtest selection for DIMTEST. *Applied Psychological Measurement*, 32, 138-155.
- Finch, H. & Habing, B. (2007). Performance of DIMTEST and NOHARM based statistics for testing unidimensionality. *Applied Psychological Measurement*, 31, 292-307.
- Alterman, A.I., Cacciola, J.S., Habing, B., & Lynch, K.G. (2007). ASI recent and lifetime summary indices based on nonparametric IRT models. *Psychological Assessment*, 19, 119-132.
- Habing, B., Finch, H. & Roberts, J.S. (2005). A  $Q_3$  statistic for unfolding item response theory models. *Applied Psychological Measurement*, 29, 457-471.
- Finch, H. & Habing, B. (2005). Comparison of NOHARM and DETECT in item cluster recovery: counting dimensions and allocating items. *Journal of Educational Measurement*, 42, 149-169.
- Habing, B., & Roussos, L.A. (2003). On the need for negative local item dependence. *Psychometrika*, 68, 435-452.
- Habing, B. (2001). Nonparametric regression and the parametric bootstrap for local dependence assessment. *Applied Psychological Measurement*, 25, 221-233.
- Douglas, J., Kim, H.R., Habing, B., & Gao, F. (1998) Investigating local dependence with conditional covariance functions. *Journal of Educational and Behavioral Statistics*, 23, 129-151.
- Stout, W., Habing, B., Douglas, J., Kim, H.R., Roussos, L., & Zhang, J. (1996). Conditional covariance based nonparametric multidimensionality assessment. *Applied Psychological Measurement*, 20, 331- 354.
- Stout, W., Nandakumar, R., & Habing, B. (1996). Analysis of latent dimensionality of dichotomously and polytomously scored test data. *Behaviormetrika*, 23, 37-65.

## Other Publications

Habing, B., Grego, J., & Vesselinov, R. (2020). *Predictive and Psychometric Properties of the TrueNorth Test*. [http://comparelanguageapps.com/documentation/TNT\\_Final\\_Report.pdf](http://comparelanguageapps.com/documentation/TNT_Final_Report.pdf)

Habing, B. (2003). [Review of the book *Introduction to nonparametric item response theory*]. *Journal of the American Statistical Association*, 98, 774-775.

Stout, W., Bolt, D., Goodwin Froelich, A., Habing, B., Hartz, S., & Roussos, L. (2003). *Development of a SIBTEST bundle methodology for improving test equity with applications for GRE® test development* (GRE Board Professional Report No. 98-15P). Princeton, NJ: Educational Testing Service.

Habing, B., & Nitscheva, D. (2001) Boundary Correction for Kernel Smoothing IRF Estimation. *University of South Carolina Statistics Technical Report No. 209 62G08-01*.

## Grants Funded

University of South Carolina, College of Arts and Sciences, Blended/On-line Course Development Grant for STAT 700-701. 5/2019-5/2020. \$4,959 awarded.

National Science Foundation, "NSF INCLUDES Statewide Consortium Supporting Underrepresented Populations in Precalculus by Organizational Redesign toward Engineering Diversity (SC:SUPPORTED)" (15510-FD01) 12/01/2017 - 11/30/2019. Co-investigator on USC portion of Clemson led grant under USC lead-PI Michael Matthews, and Co-PIs John Gerdes and Jed Lyons.

National Science Foundation (Methodology, Measurement, and Statistics Program), "Item Response Theory Models for Mixtures of Dominances and Proximity Items", 9/07-8/09 (no cost extension through 8/10), \$143,227 (\$100,326 to Statistics). Co-investigator with Christopher Zorn, Penn State University.

South Carolina Dept. of Education, "Advanced Placement Teacher Institute in Statistics", 6/01-8/01, \$10,114; 3/03-6/03, \$12,029; and 2/05-6/05, \$15,278.

National Science Foundation (Methodology, Measurement, and Statistics Program, and Statistics and Probability Program), "Advances in Local Independence and Unidimensionality Assessment for Dichotomous and Polytomous Items", 5/01 - 4/04 (no cost extension through 4/06), \$114,954.

University of South Carolina (Research and Productive Scholarship Award), "Unidimensional Locally Dependent Item Response Theory Model Based on the 3-PL Model and the Item Pair Conditional Covariances", 1/99 - 1/00, \$5,241.

## Professional Society Memberships

American Educational Research Association, American Statistical Association, National Council on Measurement in Education, Psychometric Society

## Recent Seminar and Meeting Presentations (*Since August 2016; 69 others beginning June 1996*)

"The Effect of Matching Score on DIF Analysis for NAEP-like Assessments", with Ya Mo. Electronic Board Session at the 2023 Annual Meeting of the National Council on Measurement in Education, April 13, 2023, Chicago.

"Combining Visualization Best Practices with Agency Standards for Statistical Graphics in Government Reports." With Haley Jeppson and Heike Hoffman. Round Table Discussion at the Joint Statistics Meeting, August 9, 2022, Washington DC.

- "Student Insights into Graphical Innovation for Educational and Government Reports." With Haley Jeppson. Poster at the Joint Statistics Meeting, August 9, 2022, Washington DC.
- "Studying Response Time and Performance with Students' Online Research and Comprehension Ability." with Ya Mo, Nell Sedransk, and Alexi Albert. Poster at the Annual Meeting of the National Council on Measurement in Education, April 23, 2022, San Diego.
- "Statistically Accurate Interactive Displays for Educational & Government Reports." With Lynne Stokes, Nola du Toit, Andrew White, and Mark Wilson. Joint Statistics Meeting, August 8, 2021, Virtual.
- "Evaluating Competing MIRT Models Using Different Goodness of Fit Statistics." With Xinchu Zhao. Annual Meeting of the National Council on Measurement in Education, April 14, 2018, New York.
- "Examining Compensation at the Item-level in a Multidimensional Assessment." With Xinchu Zhao. Annual Meeting of the National Council on Measurement in Education, April 14, 2018, New York.
- "Revisiting the reliability of the Classroom Assessment Scoring System " With Phillip Sherlock & Herman Knopf.. Conference on Research Innovations in Early Intervention Meeting, March 2018, San Diego.
- "A Rotatable Asymmetric Variable Compensation MIRT Model and Its Estimation." With Xinchu Zhao. Annual Meeting of the National Council on Measurement in Education, April 30, 2017, San Antonio.
- "Comparing a New Variable Compensation MIRT Model and Existing MIRT Models." With Xinchu Zhao. Annual Meeting of the National Council on Measurement in Education, April 28, 2017, San Antonio.

**Sessions Organized, Chaired, and Discussed (*Since August 2016; 20 others beginning April 2001*)**

- "AI and Blended Data." Session moderator at AI Day for Federal Statistics: CNSTAT Public Event, Washington DC, May 2, 2024.
- "Measurement Methodology Innovation". Paper session discussant for Virtual Session at the 2023 Annual Meeting of the American Education Research Association, May 5, 2023
- "Advances in Item Response Modeling". Paper session discussant at the 2023 Annual Meeting of the National Council on Measurement in Education, April 14, 2023, Chicago.
- "Visualization and Interactive Graphics Using R " Training session co-organizer and co-presenter with Haley Jeppson. At the 2023 Annual Meeting of the National Council on Measurement in Education, April 12, 2023, Chicago.
- "Differential Item Functioning and Measurement Invariance". Paper session discussion for Virtual Session at the 2022 Annual Meeting of the American Education Research Association, April 23, 2022, San Diego.
- "Item Development". Paper session discussant for session at the 2022 Annual Meeting of the American Education Research Association, April 22, 2022, San Diego.
- "An Introduction to Using R for Quantitative Methods". Training session co-organizer/instructor at the National Council of Measurement in Education with Jessalyn Smith. April 26, 2017, San Antonio.
- "Item Response Theory." Session Organizer and Chair. Latent Variables 2016, October 13, 2016, Columbia, SC.

## **Selected Department, College, and University Service Roles**

### Department of Statistics

Faculty Search Committee	1998-2005
Department Webmaster	1999-2003, 2005-2006, 2008
Undergraduate Advisor	2000-2004, 2016-2017, 2019-2024
Graduate Director	2004-2007
Chairman's Advisory Committee	2004-2007, 2010-2019, 2024-present
Colloquium Chair	2007-2009
Undergraduate Director	2009-2016, 2023-2024
Distance Education Committee	2011-2021
Faculty Mentor	2011-2019
Faculty Search Committee for Instructor Hires (Chair 2016)	2016
Distributed Learning Coordinator	2017-present
Assistant Chair	2019
Data Science Minor Department Representative	2024-present

### Program of Educational Psychology, Research, and Foundations

Faculty Search Committee	2000
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### Research Consortium on Children and Families

Faculty Search Committee	2005-2007
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### College of Arts and Sciences

Petitions and Standards Committee (COSM)	2000-2005
Student Grievance Committee	2005-2007
Curriculum Committee (Chair 2015-2017)	2007-2010, 2012, 2015-2017
Computer Committee	2008-2009
Academic Planning Council (ex-officio)	2015-2016
Distributed Learning Advisory Board	2021-2023
Ad-hoc Committee on Data Science Major (Chair 2023-2024)	2022-2024
Data Science and Data Analytics Program Director	2024-present

### University

Assessment Advisory Committee for the Provost	2000-2002
Graduate Council (Chair 2006-2007)	2004-2007
Graduate Council Program Review Committee (Chair 2009-2010)	2008-2010
Faculty Senate	2008
Advisory Group on Graduate Education to the VP of Research and Graduate Education	2010
QEP Technology Committee (Co-Chair 2010-2011)	2010-2011
USC Connect Director Hiring Committee	2011
Faculty Senate Committee on Curricula and Courses (Chair 2012-2014, Co-Chair 2023-2024)	2012-2014, 2022-present
Faculty Senate Steering Committee	2012-2014, 2023-2024
Carolina Core Committee	2012-2014
Academic Program Liaison Committee	2012-2014
Creation of Associate Member Graduate Faculty Status and Updating of Faculty Manual with Murray Mitchell and Cheryl Addy	2013
Search Committee for Director of Institutional Assessment and Compliance	2013
Provost's Interdisciplinary Advisory Committee	2023-2024
Provost's Ad-hoc Committee on Carolina Core Transferability (Co-Chair 2024)	2024
Curricular Analytics Committee	2024

## Other Selected Activities

Region II Science Fair Statistics Judge	1999-2001, 2003-2006
Faculty and Staff Moving Crew	1999-2009, 2011-2012
Guest AP Statistics Lecturer, White Knoll High School (3 classes)	2003
Graduate Student Day Poster Judge	2006

## Professional Service

American Educational Research Association	
Co-Chair for the 2004 Annual Meeting Division D Program Committee	2003-2004
Annual Meeting Proposal Reviewer (by Meeting Year)	2005-2009, 2012-2015, 2022-2023
American Statistical Association	
South Carolina Chapter Secretary/Treasurer	2000-2001
South Carolina Chapter Webmaster	2000-2004
South Carolina Chapter Vice-President	2001-2002
South Carolina Chapter President	2002-2004
National Council on Measurement in Education	
Annual Meeting Proposal Reviewer (by Meeting Year)	1999-2008, 2011-2013, 2016
Annual Award Committee	2019-2021
Advanced Placement Program (College Board)	
Led South Carolina Advanced Placement Institute in Statistics	2001, 2003, 2005
Reader for the AP Statistics Exam	2005-2009
AP Statistics Higher Education Advisory Panel	2014
AP Statistics Curriculum Development and Assessment Committee	2015

## Editorial Boards and Reviewing

Statistical Methodology Editor for the <i>Journal of the First Year Experience and Students in Transition</i>	1998-2004
Associate Editor for the <i>Journal of Statistical Computation and Simulation</i>	2009-2018.
Associate Editor for <i>Applied Psychological Measurement</i>	2019-present.
Article reviewer for <i>Alcoholism: Clinical and Experimental Research</i> ; <i>Applied Psychological Measurement</i> ; <i>Bernoulli Journal</i> ; <i>British Journal of Mathematical and Statistical Psychology</i> ; <i>Controlled Clinical Trials: Design, Methods, &amp; Analysis</i> ; <i>Educational and Psychological Measurement</i> ; <i>Electronic Journal of Statistics</i> ; <i>Evaluation and Health Professions</i> ; <i>Journal of Classification</i> ; <i>Journal of Educational &amp; Behavioral Statistics</i> ; <i>Journal of Educational Measurement</i> ; <i>Journal of Multivariate Analysis</i> ; <i>Journal of Statistical Computation and Simulation</i> ; <i>Journal of the American Statistical Association</i> ; <i>Proceedings of the National Academy of Sciences</i> , <i>Psychological Assessment</i> ; <i>Psychological Methods</i> ; <i>Psychometrika</i> ; and <i>Statistics in Medicine</i> .	
Reviewer for the Methodology, Measurement, and Statistics program of NSF	
Review Panel Member for National Institute of Mental Health	

**National Institute of Statistical Sciences (NISS)** – a 501(c)(3) national research institute

Senior Research Fellow and Associate Director for Education Activities and Research

Appointment: 25% Fall 2020, 50% Spring 2021, 2.5 months summer 2021, 50% Fall 2021-Spring 2022, 2.5 months Summer 2022, 50% Fall 2022, 20% Spring 2023, approx. 3 hours per week Summer 2023-present

NISS Expert Panels and Technical Forums for National Center for Education Statistics

School Survey Participation and Burden. (June 2022).

[https://www.niss.org/sites/default/files/technical\\_reports/School%20Survey%20Participation%20and%20Burden%20-%20FT.pdf](https://www.niss.org/sites/default/files/technical_reports/School%20Survey%20Participation%20and%20Burden%20-%20FT.pdf)

NISS Lead for recruitment, management and running of panel, and writing and editing of report.

Coordinating Designs for Multiple Surveys. (May 2022).

<https://www.niss.org/sites/default/files/Coordinating%20Designs%20for%20Multiple%20Surveys.pdf>

Provided logistics assistance for technical panel.

Connecting the Dots, I & II: Integrated Sampling Approach for Multiple Surveys. (November 2021).

<https://www.niss.org/sites/default/files/ConnectingtheDots-2022-04-29-Final.pdf>

Assisted in recruiting (part II), running and logistics of panels, and editing of report.

Setting Priorities for Federal Data Access to Expand the Context for Education Data. (March 2021).

[https://www.niss.org/sites/default/files/research\\_attachments/FT%20-%20Setting%20Priorities%20-%201%20June%202021%20final.pdf](https://www.niss.org/sites/default/files/research_attachments/FT%20-%20Setting%20Priorities%20-%201%20June%202021%20final.pdf)

Assisted in running and logistics of panel, and co-authored report.

Innovative Graphics for NCES Online Reports. (January 2021).

<https://www.niss.org/sites/default/files/Innovative%20Visualization%20Panel%20-%20Final%20Report.pdf>

Assisted in recruiting, running and logistics of panel, and co-authored report.

Post COVID Surveys (December 2020).

[https://www.niss.org/sites/default/files/research\\_attachments/FT%20-%20Post-Covid%20Surveys%20-%20FINAL%20-%207%20June%202021.pdf](https://www.niss.org/sites/default/files/research_attachments/FT%20-%20Post-Covid%20Surveys%20-%20FINAL%20-%207%20June%202021.pdf)

Assisted with panelist selection, review of material, running and logistics of panel, and editing of report.

Selected other NISS Activities

Prepared subcontracting grant proposal materials for NHTSA 2401.755 subcontract proposal for RTI International -2024

Led preparation and submission of response to PRESTO Request for Information to "Analysis and Reporting from the Individuals with Disabilities Education Act (IDEA) State and Local Implementation Study 2019 Data" with Jeremy Finn at SUNY Buffalo, Lynne Stokes at SMU, Michael Elliott at Michigan, and Tammiee Dickenson at South Carolina, Ya Mo at Boise State/NISS, and Nell Sedransk. – 2023.

Assisted in preparation and submission of response to Building Evidence: Trafficking - MRAS request for Information for the Department of Health and Human Services Administration for Children and Families. – 2023.

Assisted in preparation and submission of Market Research Response for SBA-BPA Evaluation and Research Services to the US General Services Administration – 2023.

Principal NISS Researcher in Phase II proposal for Procurement of Research Evaluation and Statistics Task Orders (PRESTO) IESE220353AP with Institute of Education Sciences. (Successfully obtained ID/IQ Contract). – 2022.

Assisted in Phase I proposal for Procurement of Research Evaluation and Statistics Task Orders (PRESTO) IESE220353AP with Institute of Education Sciences. (Successfully advanced to phase two). – 2022.

Assisted in NISS portion of proposal for AHRQ-22-10004 Scientific Resource Center to Support the USPSTF proposal (AIR Main). Proposal was scored competitive and qualified for negotiation period. Unsuccessful. – 2022.

Organized and managed 2022 SAID in Graphics Data Visualization Contest

Coordinator of Interactive Visualization for Education Data and Statistics project for National Center of Education Statistics (With Heike Hoffman and Will Ju at Iowa State; Haley Jeppson and Nell Sedransk at NISS). – 2021-2022.

Organized and managed 2020-2021 SAID in Graphics Data Visualization Contest

### **Doctoral Students Directed in Statistics (*with initial appointment*)**

Brian Harrold - Current

Xinchu Zhao, 2018 – Statistical Modeler at Imbellus

Han Lee, 2016 – Predictive Modeler at State Auto Insurance

Yin Fu, 2015 – Quantitative Associate at Wells Fargo

Na Yang, 2013 – Senior Statistician at AdvanceMed

Yuling Feng, 2013 – Senior Statistical Analyst

Tan Li, 2011 – Visiting Assistant Professor of Biostatistics, Florida International University

Leslie Hendrix, 2011 – Instructor, University of South Carolina

Meng Wu, 2008 – Associate Psychometrician at Educational Testing Service

Litong Zhang, 2007 – Research Scientist at CTB/McGraw Hill

Roland Deutsch, 2007 (co-chaired with John Grego) – Assistant Professor of Statistics, UNCG

### **Doctoral Students Directed in Educational Psychology and Research (*with initial appointment*)**

Geophrey, Odero – Current (co-directing with Christine DiStefano)

Phillip Sherlock, 2019 (co-directed with Christine DiStefano) – Special Data Projects Coordinator, Office of Special Education Services, South Carolina Department of Education.

Maureen Petkewich, 2016 (co-chaired with Christine DiStefano) – Senior Instructor and Assistant Chair, USC

Jessalyn Smith, 2009 (co-chaired with Christine DiStefano) - Research Scientist at CTB/McGraw Hill

Beth Johnson, 2009 (co-chaired with Robert Johnson) – Visiting Assistant Professor, The College of New Jersey

Tammie Dickenson, 2005 (co-chaired with Michael Seaman) – Director and Research Assistant Professor, Office of Program Evaluation at USC

Holmes Finch, 2002 (co-chaired with Huynh Huynh) – Assistant Professor of Educational Psychology at Ball State

### **B.S., M.I.S., and M.S. Students Directed in Statistics**

#### Senior Honors Thesis

Jamie Winterton, 2000

Barth Kelly, 2001

James Wu, 2010

Jonathan Tregde, 2017

Thomas Duncan, 2018

Austin Kock, 2018

Jacqueline Purtell, 2022

Aiden Mercer, 2024

#### Master of Industrial Statistics Master of Science

Chris Finney, 2003

Randy Ewart, 2006

Mariana Toma-Drane, 2006

April Bolin, 2008

Lisa Dilks, 2008

Renee Dowdy, 2008

Erika Rhett, 2009

Beth Beard, 2002

Sharon Dziuba, 2002

Dorota Staniewska, 2002

Alex McLain, 2005

Chaitali Datta, 2006

Jessalyn Smith, 2006

Cristina Ungureanu, 2007

Brenna Veale, 2007

Barth Kelly, 2008

Bryonna Bowen, 2018

Dongho Shin, 2019



## **Courses Taught at the University of Illinois at Urbana-Champaign**

MATH 118 – Numeracy  
MATH 120 – Calculus and Analytic Geometry I (Merit Workshop Discussion Session)  
MATH 125 – Elementary Linear Algebra with Applications  
MATH 130/132 – Calculus and Analytic Geometry II (x2)  
MATH 242 – Calculus of Several Variables  
STAT 100 – Statistics  
STAT 310 – Introduction to Mathematical Statistics and Probability I (Discussion Session) (x2)

## **Courses Taught at the University of South Carolina**

SCCC 312 – Proseminar in Statistics	STAT 600 – Statistics for Applied Management (x4)
STAT 110 – Introduction to Statistical Reasoning (x8)	STAT 700 – Applied Statistics I (x7)
STAT 511/MATH 511 – Probability (x2)	STAT 701 – Applied Statistics II (x7)
STAT 512 – Mathematical Statistics (x2)	STAT 702 – Introduction to Statistical Theory I (x4)
STAT 513 – Theory of Statistical Inference (x2)	STAT 703 – Introduction to Statistical Theory II (x4)
STAT 515 – Statistical Methods I (x21)	STAT 718 – Statistical Rating Methods
STAT 516 – Statistical Methods II (x10)	STAT 730 – Multivariate Analysis (x3)
STAT 518 – Nonparametric Statistical Methods (x4)	STAT 740 – Statistical Computing
STAT 530 – Applied Multivariate Statistics (x8)	STAT 778/EDRM 828 – Item Response Theory (x10)
STAT 599 – AP Statistics for Teachers (x3)	

## **Course and Program Creation and Revision**

Co-created STAT 778/EDRM 828 – Item Response Theory, with Huynh Huynh in Educational Studies  
Co-created STAT 530 – Applied Multivariate Statistics, with Don Edwards  
Course content and bulletin revision for STAT 515 – Statistical Methods I  
Course content and bulletin revision for STAT 516 – Statistical Methods II  
Co-created STAT 591/SMED 591 – Data Analysis for Teachers, with Don Jordan in Science Education  
Created STAT 650 – AP Statistics for Teachers  
Chaired re-creation and bulletin revision of STAT 510 – Applied Stochastic Processes  
Revised the Minor in Risk Management and Insurance with Doug Meade in Mathematics and Jean Helwege and Gregory Niehaus in Finance  
Created STAT 600 – Statistics for Applied Management  
Co-created Minor in Secondary Education Mathematics with Ed Dickey and Jan Yow in Education  
Revised Masters and Certificate of Applied Statistics (MAS & PBACC) Assessment Plans  
Created STAT 301- Statistical Methods for Data Analytics  
Lead for development of BS in Data Science and BS in Data Analytics BS  
Co-created STAT 531/CSCE 588 – Advanced Machine Learning with Implementation with James Bird in Statistics  
Revised the Data Science Minor to reflect the requirements of the Data Science and Data Analytics degrees

## **Teaching Honors**

Nominated for Michael J. Mungo Undergraduate Teaching Awards 2001, 2005 (finalist), and 2009, and Michael J. Mungo Graduate Teaching Award 2006 and 2008 (finalist).

1994 University of Illinois, Department of Mathematics, Teaching Assistant Instructional Award.

Incomplete List of Excellent Instructors at the University of Illinois three times. For courses taught Spring 1992, Spring 1994, and Fall 1994 - an all university student selected honor.