

William L. Goffe

Address: 304 Kern Building
Department of Economics
Penn State University
University Park, PA 16802

Phone: 814-867-3299 (work) (315) 657-5014 (cell)

E-Mail: bill.goffe@psu.edu

Citizenship: USA

Age: 63

Graduate Studies

School: University of North Carolina at Chapel Hill

Fields: Monetary (major) and Econometrics (minor)

Dissertation: *A Numerical Dynamic General Equilibrium Business Cycle Model*

PhD Awarded: May 1990

Pre-Doctoral Studies

BA in Mathematics and Economics (double major), 1981

University of Virginia, Charlottesville, VA

Journal Publications

“Online Implementation of Portions of ‘The Cognitive Challenges of Effective Teaching,’” *The Journal of Economic Education*, vol. 52, no. 1, 2021.

“Beyond the Flipped Class: The Impact of Research-Based Teaching Methods in a Macroeconomics Principles Class” (with Austin Boyle), *American Economic Review Papers and Proceedings*, vol. 108, 2018.

“A Survey of Principles Instructors: Why Lecture Prevails” (with David Kauper), *Journal of Economic Education*, vol. 45, no. 3, 2014

“Multi-core CPUs, Clusters, and Grid Computing: a Tutorial” (with Michael Creel), *Computational Economics*, vol. 32, no. 4, 2008.

“Teaching with Technology: May You Live in Interesting Times,” *Journal of Economic Education*, (with Kim Sosin), vol. 36, no. 3, 2005

“The Internet and the American Economic Association - A Set of Proposals,” *Social Science Computer Review*, vol. 22, no. 4, 2004

“Display and Interactive Languages for the Internet: HTML, PDF, and Java,” (with Dirk Eddelbuettel), *Computational Economics*, vol. 14, no. 1, 1999, pp. 89-107.

“The Future Information Infrastructure in Economics,” (with Robert P. Parks) *The Journal of Economic Perspectives*; vol. 11, no. 3, 1997, pp. 75-94.

“SIMANN: A Global Optimization Algorithm using Simulated Annealing,” *Studies in Nonlinear Dynamics and Econometrics*, vol. 1, no. 3, 1996.

“Computer Network Resources for Economists” *Journal of Economic Perspectives*, vol. 8 no. 3, 1994,

“Global Optimization of Statistical Functions with Simulated Annealing” (with Gary Ferrier and John Rogers) *Journal of Econometrics*, vol. 60, no. 1/2, 1994.

“A User's Guide to the Numerical Solution of Two-Point Boundary Value Problems Arising in Continuous Time Dynamic Economic Models” (Technical Note) *Computational Economics*, vol. 6, 1993.

“Simulated Annealing: An Initial Application in Econometrics” (with Gary Ferrier and John Rogers) *Computer Science in Economics and Management* vol. 5, no. 2, 1992.

Other Publications

“Submissions to the Online Section of the Journal of Economic Education,” *Journal of Economic Education*, vol. 45, no. 2, April 2014.

“Journals and Beyond: Publishing Economics Education Research,” (with Peter Davies), in *International Handbook on Teaching and Learning Economics*, KimMarie McGoldrick and Gail Hoyt, editors, Edward Elgar, 2011.

“Using the Internet and Computer Technology to Teach Economics,” (with Kim Sosin) in *Teaching Economics to Undergraduates: More Alternatives to Chalk and Talk.*, William E. Becker, Michael Watts, and Suzanne R. Becker, editors, 2006.

“Resources for Economists on the Internet,” *Journal of Economic Education*, vol. 31, no. 1 (Winter), 2000, p. 8.

Book Reviews

The Economics of Electronic Commerce, Soon-Yong Choi, Dale O. Stahl, and Andrew B. Whinston, *Journal of Economic Literature*, vol. XXXVIII, March 2000, pp. 151-2.

Winners, Losers and Microsoft, revised edition, Stan J. Liebowitz and Stephen E. Margolis, Oakland: The Independent Institute, 2001; EH.Net, 7/2001EH.Net, 7/2001.

Proceedings

“Wavelets in Macroeconomics: An Introduction” Ch. 8., pp. 137-50, *Computational Techniques for Econometrics and Economic Analysis*, David A. Belsley, ed., Kluwer Academic Publishers: Dordrecht, 1994.

Working Papers

“Preconceptions of Principles Students” (with Douglas Bice, Elisabeth S. Curtis, Wayne Geerling, Adam Hoffer, Solina Lindahl, Mark Maier, Brain Peterson, and Wendy Stock)

“Non-Cognitive Skills and the Performance of Macro Principles Students” (with Deborah Goins)

“Initial Misconceptions in a Macro Principles Class”

“Next Steps in the Information Infrastructure in Economics”

“Redesigning a Large Macro Principles Course Using Bain's *What the Best College Teachers Do*”

“Valuation of Non-Market Goods Using Computer-Assisted Surveys: a Comparison of Data Quality from Internet and RDD Samples” (with Mark Dickie and Shelby Gerking)

“Visualizing Multi-Dimensional Functions in Economics”

“A Toolkit for Optimizing Functions in Economics”

Editorial

Associate Editor (Online Section), *Journal of Economic Education*

Editorial Board Member, *Netnomics*

Associate Editor, *Computational Economics*

Awards

The David Kendrick Prize, awarded by the Society for Computational Economics, 2021 for service to the Society (Secretary-Treasurer from 1994 to 2021)

University Excellence in Teaching Award, 1998 (five awarded annually by the University of Southern Mississippi).

Louis K. Brandt Faculty Publication Award, 1995 (awarded bi-annually in the College of Business Administration, Univ. of Southern Mississippi; shared with two other recipients).

Teaching Fellow (as graduate student) 1984-85.

Service

AEA Committee on Economic Education, 2018 – 2021

Co-Chair, Liberal Arts Teaching Group (Penn State)

Co-Chair, Innovative Teaching at Penn State (ITAP)

Teaching Effectiveness Task Force (Penn State)

Software

Licensed SA, Fortran code for simulated annealing, to Richard Quandt of Princeton University for resale in his GQOPT statistical optimization package.

Simulated annealing code placed in Netlib and Statlib, international on-line libraries of numerical and statistical software.

Textbook Supplement

The Economist's Guide to the Internet, Houghton Mifflin, 1995.

Grants

“Study Smart: Using Formative Assessments to Create Personalized Study Materials,” awarded by Penn State’s Center for Online Innovation in Learning, (2015). \$40,000.

Received 50 hours of CPU time on the North Carolina Supercomputer Center's Cray Y-MP in a peer-reviewed process. (1992)

Workshops Attended

“Team-Based Learning Academy,” University of Albany, August 5-6, 2013

“Institute for Pedagogy in the Liberal Arts,” Oxford College of Emory University, Oxford Georgia, May 14-15 (attend first half), 2013

“Developing Modules for Teaching Economics,” Science Education Resources Center (SERC), Carleton College, Northfield, MN October 2009 (participated in developing the “Classroom Response Systems” module)

AEA-NCEE-Kazanjian “Active Learning Workshop,” September 1996, Chapel Hill, NC (slightly abbreviated due to Hurricane Fran)

Presentations

Conference on Teaching and Research in Economic Education (CTREE), June 2, 2022
Discussion of “Why Students Don’t Like School – A Cognitive Scientist Answers Questions About How the Mind Works and What It Means for the Classroom” by Daniel T. Willingham (workshop), with Michael Enz

Allied Social Science Association (ASSA) 2022 Virtual Annual Meeting, American Economic Association, January 8, 2022, “Cognitive Science Teaching Strategies and Literacy-Targeted Economics Complementarities,” with Scott A. Wolla

Allied Social Science Association (ASSA) 2022 Virtual Annual Meeting, American Economic Association, January 7, 2022, “Educational Technology for Teaching Economics—Where to Start and How to Grow?”

Economics Education Research Group, Monash University, Melbourne, July 19, 2021
“Why Economics Education Research is So Important” (via Zoom)

Conference on Teaching and Research in Economic Education (CTREE), June 3, 2021
Discussion of “Make it Stick: The Science of Successful Learning” by Peter Brown, Henry Roediger, and Mark McDaniel (workshop), with Michael Enz

Department Teaching Seminar, Arizona State University Department of Economics, Tempe, AZ, January 10, 2020, “Enhance Your Teaching with What is Known About How Humans Learn”

St. Louis Fed Professors Conference, Federal Reserve Bank of St. Louis, November 14, 2019, “Enhance Your Teaching with Recent Discoveries about How We Learn,”

UNC Wilmington Annual Economics Teaching Workshop, Department of Economics, UNC Wilmington, Wilmington, NC, October 12, 2019, “How to Use Results from the Science of Learning in Your Classroom,”

Australasian Teaching Economics Conference, Department of Economics, University of Melbourne, July 17, 2019, “Managing Diversity in Classroom: Best approaches to Teach Diverse Students,” Keynotes/Plenary Addresses

Conference on Teaching and Research in Economic Education (CTREE), May 30, 2019
Discussion of “Small Teaching: Everyday Lessons from the Science of Learning” by James Lang (workshop) with Michael Enz

Department Teaching Seminar, University of Toronto Economics Department, Toronto, Ontario, May 17, 2019, “How to Use Results from the Science of Learning in Your Classroom”

Economics Teaching Workshop, Economics Department, University of Kentucky, April 13, 2019
“How to Use Results from the Science of Learning in Your Classroom”

Conference on Teaching and Research in Economic Education (CTREE), San Antonio, May 30, 2018, “Creating and Using Standard Assessments in Economics: The TUCE and Beyond” Panel Discussion; with Douglas McKee, George Orlov, and Parama Chaudhury

Allied Social Science Association, Philadelphia, January 6, 2018
“Is it Time to Change the Principles Curriculum?” Panel Discussion; with Tyler Cowen, Jodi Beggs (substituting for Jennifer Imazeki) and Jose Vazquez

Allied Social Science Association, Philadelphia, January 5, 2018
“Beyond the Flipped Class: The Impact of Research-based Teaching Methods in a Macroeconomics Principles Class” (with Austin Boyle)

St. Louis Fed Professors Conference, November 3, 2017
“Research-Based Methods for Teaching Macro Principles”

College of Business Administration, University of Nebraska at Omaha, October 21, 2017
“Cognitive Science and Tested Teaching Methods”

21st Annual University of Kentucky Economics Teaching Workshop, April 2, 2016
“Importing STEM Evidence-Based Teaching Methods into a Large Macro Principles Course” (poster)

Allied Social Science Association, San Francisco, January 4, 2016
“Importing STEM Evidence-Based Teaching Methods into a Large Macro Principles Course” (poster)

Schreyer Conference: Transformative Teaching and Learning (Penn State), October 20, 2015
“Study Smart: Analytics for All to Improve Learning Outcomes” (with T.K. Lee and Lindsey Ottaviani)

Conference on Teaching and Research in Economic Education (CTREE), Minneapolis, May 28, 2015
“Why Active Learning Works and How to Improve It: Using Findings from the Learning Sciences to Improve Teaching Practices and Student Outcomes” (workshop) (with Scott P. Simkins)

Teaching and Learning with Technology Symposium (Penn State), March 21, 2015
“Study Smart: Generation of Study Plans for Individual Students,” (with T.K. Lee)

Eastern Economic Association, New York, February 27, 2015
“Preconceptions of Principles Students” (with Douglas Bice, Elisabeth S. Curtis, Wayne Geerling, Adam Hoffer, Solina Lindahl, Mark Maier, Brain Peterson, and Wendy Stock)

Allied Social Science Association, Boston, January 3, 2015
“Preconceptions of Principles Students” (with Douglas Bice, Elisabeth S. Curtis, Wayne Geerling, Adam Hoffer, Solina Lindahl, Mark Maier, Brain Peterson, and Wendy Stock)

Southern Economic Association, Atlanta, November 22, 2014
“Preconceptions of Principles Students” (with Douglas Bice, Elisabeth S. Curtis, Wayne Geerling, Adam Hoffer, Solina Lindahl, Mark Maier, Brain Peterson, and Wendy Stock)

Conference on Teaching and Research on Economic Education (CTREE), Washington, May 30, 2014
“Non-Cognitive Skills and the Performance of Macro Principles Students” (with Deborah Goins)

Conference on Teaching and Research on Economic Education (CTREE), Washington, May 28, 2014
“Preconceptions of Principles Students” (with Douglas Bice, Elisabeth S. Curtis, Wayne Geerling, Adam Hoffer, Solina Lindahl, Mark Maier, Brain Peterson, and Wendy Stock)

Center for Excellence in Science Education, Eberly College of Science, Penn State University, April 7, 2014, “Team-Based Learning: An Introduction”

Allied Social Science Association, Philadelphia, January 4, 2014
“Non-Cognitive Skills and the Performance of Macro Principles Students” (with Deborah Goins)

Southern Economic Association, Tampa, November 23, 2014
“Non-Cognitive Skills and the Performance of Macro Principles Students” (with Deborah Goins)

Conference on Teaching and Research on Economic Education (CTREE), Chicago, May 31, 2013
“A Survey of Principles Instructors: Why Lecture Prevails”

Conference on Teaching and Research on Economic Education (CTREE), Chicago, May 29, 2013
“Initial Misconceptions in Macro Principles Classes”

Allied Social Science Association, San Diego, January 8, 2013
“A Survey of Principles Instructors: Why Lecture Prevails” (with David Kauper)

Southern Economic Association, New Orleans, November 16, 2012
“A Survey of Principles Instructors: Why Lecture Prevails”

National Conference on Teaching Economics, American Economic Association, Boston, June 1, 2012
“An Interactive Workshop for Teaching Large College Classes,”

SUNY Oswego Center for Excellence in Learning and Teaching, November 8, 2011
“Pitfalls and Joys of Clickers in the Classroom”

SUNY Oswego Center for Excellence in Learning and Teaching, October, 2011
“Alternatives to Lecture”

National Conference on Teaching Economics, Palo Alto, California, June 1, 2011
“Intentional Use of Personal Response Systems (Clickers) to Address Student Misconceptions, Close Learning Gaps, and Improve Student Learning – Workshop”
(with Scott P. Simkins)

National Conference on Teaching Economics, Palo Alto, California, June 1, 2011
“An Introduction to Team-Based Learning – Panel Discussion”
(with Jennifer Imazeki, Molly Espey, and Paul L. Hettler)

SUNY Oswego Spring Breakout, May 19, 2011
“What Does Peer-Reviewed Research Tell Us About Improving Learning?” (repeat)

SUNY Oswego Winter Breakout, January 21, 2011
“What Does Peer-Reviewed Research Tell Us About Improving Learning?”

SUNY Oswego Winter Breakout, January 21, 2011
“Best Practices in Clicker Usage”

Penn State University Economics Department Teaching Seminar, April 30, 2010
“Initial Misconceptions in a Macro Principles Class

Allied Social Science Association, Atlanta, January 4, 2010
“Initial Misconceptions in a Macro Principles Class”

Allied Social Science Association, Atlanta, January 4, 2010
“Team-Based Learning in the Economics Classroom” (poster)

SUNY Oswego Center for Excellence in Learning and Teaching, October 9, 2009
“Using Clickers in the Classroom: How Might They be Used to Increase Student Learning?” (repeat)

SUNY Oswego Center for Excellence in Learning and Teaching, October 16, 2009
“Team-Based Learning in the Economics Classroom”

SUNY Oswego Center for Excellence in Learning and Teaching, April 17, 2009
“Using Clickers in the Classroom: How Might They be Used to Increase Student Learning?”

Texas Christian University, March 13, 2009
“My Evolution as a Teacher”

University of Kansas Economics Department Seminar, March 28, 2008
“Next Steps in the Information Infrastructure in Economics”

Allied Social Science Association, New Orleans, January 2008
“Redesigning a Large Macro Principles Course Using Bain's *What the Best College Teachers Do*”

Third International Conference on e-Social Science, Ann Arbor, MI, October 2007
“Next Steps in the Information Infrastructure in Economics”

5th Annual Teaching Economics Workshop, Wilmington, NC, October 2005
“Making Technology Work for You and Your Students: Simulations, Security, Feedback, and Detecting Plagiarism”

West Virginia Economics Department Seminar, September 23, 2005
“Multi-core CPUs, Clusters, and Grid Computing: a Tutorial”

11th International Conference on Computing in Economics and Finance (Washington, DC, June 2005)
“Multi-core CPUs, Clusters, and Grid Computing: a Tutorial” (with Michael Creel)

8th International Conference on Computing in Economics and Finance (Aix, France), June 2002
“Metadata Standards for Economics Web Sites”

Midwest Economics Association, March 2002
“What’s on the Internet for Teaching Economics,” (hour long presentation)

American Economic Association Annual Meeting, January 2002
“What’s on the Internet for Economists: An Update” (session long presentation with Robert P. Parks of Washington University and George Greenwade of VMI)

Southern Economic Association, November 2001
“What’s on the Internet for Economists: An Update,” (session long presentation)

Hamilton College, October 2001
“Using the Internet for Economics Teaching,” Hamilton College

Midwest Economics Association Annual Meeting, March 2001
“Using the Internet for Teaching,” (a session-long presentation with Robert P. Parks)

American Economic Association Annual Meeting, January 2001
“Web Standards -- Metadata for Economics Internet Sites” (organized an invitation-only session)

American Economic Association Annual Meeting, January 2001
“What's on the Internet for Economists: Another Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Technology and Collaboration in the Classroom, Denison University, December 2000
“Making the Internet Work for You” (an hour long talk with Robert P. Parks)

Southern Economic Association Annual Meeting, November 2000
“What’s on the Internet for Economists: Another Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Society for Computational Economics Annual Meeting (Barcelona), July 2000
“Visualizing Multi-Dimensional Functions in Economics?”

Western Economic Association, July 2000
What’s on the Internet for Economists: Another Update (a session-long presentation with Robert P. Parks)

American Economic Association Annual Meeting, January 2000
“What's on the Internet for Economists: Another Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Southern Economic Association Annual Meeting, November 1999 “What’s on the Internet for Economists: Another Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Academy of Economics and Finance Annual Meeting, February 1999
“Teacher Training Program — “Technology Training Program: Advanced Topics”

American Economic Association Annual Meeting, January 1999
“What's on the Internet for Economists: A Further Demonstration and Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Southern Economic Association Annual Meeting, November 1998
“What’s on the Internet for Economists: A Further Demonstration and Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Hungarian Central Bank, Budapest, June 1998
“The Internet for Economists” (with Robert P. Parks)

World Bank Human Development Conference, Washington D.C., March 1998
“The Internet for International Economists” (with Robert P. Parks)

American Economic Association Annual Meeting, January 1998
“The Internet for Economists: A Further Update” (3 session-long presentations with Robert P. Parks)

American Economic Association Annual Meeting, January 1998
“The Economics Profession and the Internet: What Roles Should the AEA and Others Take?” (a roundtable co-organized with Robert P. Parks)

Southern Economic Association Annual Meeting, November 1997,
“The Internet for Economists — A Further Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Federal Reserve Bank of St. Louis, November 1997
“The Internet for Economists” (with Robert P. Parks)

Society for Computational Economics Annual Conference, Stanford, CA, July 1997
“A Toolkit for Optimizing Functions in Economics,”

American Economic Association Annual Meeting, January 1997
“What's on the Internet for Economists: Another Update” (3 session-long presentations with Robert P. Parks and George Greenwade)

Southern Economic Association Annual Meeting, November 1996
“What's on the Internet for Economists: Another Update” (a session-long presentation with Robert P. Parks and George Greenwade)

Central Intelligence Agency, November 1996

“What's on the Internet for CIA Economists” (with Robert P. Parks)

ACS-Mellon Foundation Pilot Project, Centre College, August 1996

“The Internet for Economists (with a Teaching Emphasis)” (with Robert P. Parks)

Society for Computational Economics Annual Meeting, Geneva, June 1996,

“The Future Information Infrastructure in Economics” (with Robert P. Parks); Plenary Session

Economics Department, University of Bonn, June 1996

“Resources for Economists on the Internet,” June 1996 (with Robert P. Parks)

Economics Department, University of California, Berkeley January 1996

“What's on the Internet for Economists: A Demonstration” (with Robert P. Parks)

American Economic Association Meeting, January 1996

“What's on the Internet for Economists: A Demonstration” (3 session-long presentations with Robert P. Parks and George Greenwade)

Southern Economic Association Meeting, November 1995

“What's on the Internet for Economists” (session-long presentation with Robert P. Parks and George Greenwade)

Society for Computational Economics Meeting, May 1995

“Resources for Computational Economists on the Internet”

Bureau of Labor Statistics, April 1995

“What's on the Internet for Statisticians: A Demonstration” (2 two-hour sessions with Robert P. Parks and George Greenwade)

West Virginia University, April 1995

“What's on the Internet for Economists: A Demonstration”

American Economic Association Meeting, January 1995

“What's on the Internet for Economists: A Demonstration” (3 session-long presentations with Robert P. Parks and George Greenwade)

American Finance Association Meeting, January 1995

“What's on the Internet for Financial Economists: A Demonstration and Roundtable Discussion” (with Robert P. Parks, George Greenwade, Wayne Marr, and Michael Jensen).

American Economic Association Meeting, January 1995

“Supporting Computer Aided Instruction with the Internet” (invited paper for the Computer Aided Instruction session)

Southern Economic Association Meeting, November 1994

“What's on the Internet for Economists” (session-long presentation with Robert P. Parks)

IFAC Workshop on Computing in Economics (Amsterdam), June 1994

“The Structure of Neural Networks”

Missouri Valley Economic Association Meeting, February 1994
“The Internet for Economists” (session-long presentation with Robert P. Parks and George Greenwade)

Midsouth Academy of Economics and Finance Meeting, February 1994
“Computer Network Resources for Economists”

Drew University, January 1994
“The Internet for Social Scientists”

Southern Economic Association Meeting, November 1993
“Wavelets in Macroeconomics: An Introduction”

Supercomputing in Economics, Free University of Brussels, Brussels, Belgium, June 1993
“Global Optimization of Statistical Functions with Simulated Annealing” (invited talk)

University of North Carolina at Chapel Hill Economics Department Macroeconomics Seminar, May 1993
“Wavelets in Macroeconomics: An Introduction”

Society for Economics Dynamics and Control Meeting, June 1992
“Wavelets in Macroeconomics”

Southern Economic Association Meeting, November 1990
“An Alternative Strategy for Testing Forward Foreign Exchange Market Efficiency”

Society for Economics Dynamics and Control Meeting, 1990
“Global Optimization of Statistical Functions”

Southern Economic Association Meeting, November 1989
“Global Maximization of Likelihood Functions”

Southern Economic Association Meeting, November 1987
“An Intertemporal Model of the Firm with Financing”

Teaching, Research, and Other Experience

- 2021: Teaching Professor, Penn State University
- 2018: Associate Teaching Professor at Penn State University (title change across the institution)
- 2012: Senior Lecturer at Penn State University
Teaching Macro Principles and Intermediate Macro
- 2006: Full Professor at SUNY Oswego
Taught Macro Principles, Intermediate Macro, Money and Banking, and Financial Markets
- 2002: Tenured at SUNY Oswego
- 2000: Associate Professor at SUNY Oswego
- 1999: Tenured at the University of Southern Mississippi
Taught Macro & Micro Principles, Money and Public Policy, and Statistics
- 1996: Associate Professor at the University of Southern Mississippi
(untenured due to insufficient time in state)
- 1993: Assistant Professor at the University of Southern Mississippi
- 1992: Visiting Assistant Professor at the University of North Carolina at Wilmington
Taught Macro Principles, Money and Capital Markets

- 1990: Visiting Assistant Professor at Southern Methodist University
Taught Macro Principles, Money and Banking, Computing for Economists (an Applied MA course), and a senior topics course in macro
- 1986: Assistant Professor at the University of Texas at Arlington
Taught Money and Banking, Business Cycles (Senior Level), Principles of Macro (Intermediate, MBA, and MA)
- 1985: Summer Intern at the Board of Governors of the Federal Reserve System
- 1981: Lecturer, Teaching Assistant and Research Assistant during graduate school at the University of North Carolina at Chapel Hill