

Curriculum Vitae

Mike Patterson

Dillard College of Business
- Management

Date of Hire: 1977

1649 Victory

Wichita Falls, Texas 76301

mike.patterson@msutexas.edu

Academic Background

Ph.D. University of North Texas.

M.B.A. Midwestern State University.

B.B.A. Midwestern State University.

Work Experience

Academic Experience

Professor of Management, Midwestern State University (1977 - Present), Wichita Falls, Texas. Dillard College of Business

Teaching Fellow, North Texas State University (1976 - 1977), Denton, Texas.

Non-Academic Experience

National

Senior Systems Analyst, Siemens Allis Corp. (1974 - 1976), Wichita Falls, Texas.

Systems Analyst, Arthur Andersen (1973 - 1974), Dallas, Texas.

Courses Taught

Courses from the Teaching Schedule: BUSINESS STATISTICS II, GENERAL ECONOMICS, INTRODUCTION TO BUSINESS, OPERATIONS MANAGEMENT, QUANTITATIVE METHODS, QUANTITATIVE METHODS, RESEARCH IN BUSINESS TOPICS, SEMINAR IN INDUSTRIAL MANAGEMENT, THESIS

Other Teaching Activities

Course (Existing) - Compensated Redesign

2023-2024 - Operations Management. Course (Existing) - Compensated Redesign.

2022-2023 - Course Development. Course (Existing) - Compensated Redesign.

2021-2022 - Course Development. Course (Existing) - Compensated Redesign.

2019-2020 - Course. Course (Existing) - Compensated Redesign.

2018-2019 - Course. Course (Existing) - Compensated Redesign.

2017-2018 - Course Development. Course (Existing) - Compensated Redesign.

2016-2017 - Course Development. Course (Existing) - Compensated Redesign.

2015-2016 - Course. Course (Existing) - Compensated Redesign.

2014-2015 - Course. Course (Existing) - Compensated Redesign.

2013-2014 - Course (Existing) - Compensated Redesign.

2013-2014 - Course (Existing) - Compensated Redesign.

2012-2013 - Course (Existing) - Compensated Redesign.

Thesis / Dissertation Committee - Chair

2006-2007 - Thesis / Dissertation Committee - Chair.

Other Teaching Activities

2011-2012 - Other Teaching Activities.

2009-2010 - Other Teaching Activities.

Intellectual Contributions:

Refereed Articles

- Patterson, M., Martinez, J., & Forrester, R. (2023). Puzzles in the College Classroom: An Optimization Model Approach to Martin Gardner's Digit Placing Problem. *Business Education Innovation Journal*, 15 (1), 28-34.
- Forrester, R., & Patterson, M. (in press, 2022). The Bridge and Torch Problem: Developing Critical Thinking Skills with Puzzle-Based Learning. *Journal of Financial Education*, 48 (1).
- Forrester, R. C., & Patterson, M. C. (2022). A Mathematical Model of Loyd's Archery Puzzle. *Business Education Innovation Journal*, 14 (1), 59-64.
- Patterson, M., & Friesen, D. (2020). An Optimization Model Approach to Dudeney's Grand Tour. *Business Management Dynamics*, 10 (03), 13-23.
- Patterson, M., & Friesen, D. (2019). An Integer Programming Solution to the Riddle of the Pilgrims. *Journal of Applied Quantitative Methods*, 14 (4).
- Patterson, M., & Friesen, D. (2019). Variants of the Traveling Salesman Problem. *Studies in Business and Economics*, 14 (1), 208-220.
- Patterson, M., & Friesen, D. (2018). A Model of Sam Loyd's Outwitting the Weighing Machine. *Business Management Dynamics*, 8 (2 19-26).
- Patterson, M. (2017). A Mathematical Optimization Model of the Magliozzi Brothers' Revolt of the Lab Rats Puzzle. *Journal of Applied Quantitative Methods*, 12 (4).
- Patterson, M., & Friesen, D. (2016). A Mathematical Model of Sam Loyd's Mars Canals Maze. *Business Management Dynamics*, 6 (5), 21-29.
- Patterson, M., Friesen, D., & Harmel, B. (2015). A Spreadsheet Solution to H. E. Dudeney's Puzzle Visiting the Towns. *Journal of Applied Quantitative Methods*, 10 (3), 76-83.
- Friesen, D., Patterson, M. C., Harmel, B., & Martinez, J. (2014). A Mathematical Model of Archimedes' Cattle Problem. *Journal of Applied Quantitative Methods*, 9 (1).
- Patterson, M., Harmel, B., & Martinex, J. (2014). A Spreadsheet Simulation Model of Sam Loyd's Carnival Dice Game. *International Journal of Business Management and Economic Research*, 5 (2), 44-52.
- Friesen, D., Patterson, M., & Harmel, B. (2013). A Genetic Algorithm Spreadsheet Model For Optimizing A Combinatorial Problem. *International Journal of Management Research and Review*, 3 (3), 2497-2512.
- Friesen, D., Patterson, M. C., & Harmel, B. (2013). A Spreadsheet Optimization Model for Solving Sudoku Problems. *Business Management Dynamics*, 2 (9), 15-22.
- Stambaugh, J., Patterson, M., & Harmel, B. (2012). Optimizing Start-Up Locations: A Zero-One Spreadsheet Model for Maximizing Potential Target Population in Contiguous Counties in South Carolina. *Business Management Dynamics*, 1 (7), 1-11.
- Friesen, D., Patterson, M., & Harmel, B. (2011). A Comparison of Multiple Regression and Neural Networks for Forecasting Real Estate Values. *Regional Business Review*, 30, 114-138.
- Patterson, M., & Harmel, B. (2010). The Coin Changing Problem as a Mathematical Model. *Journal of Applied Quantitative Methods*, 5 (2), 298-301.
- Patterson, M., Harmel, B., & Friesen, D. (2010). A Spreadsheet Simulation of the Monty Hall Problem. *American Journal of Business Education*, 3 (2), 1-13.
- Penrose, L., Li, Q., Harmel, B., & Patterson, M. (2010). Factors Affecting Students' Credit Card and Student Loan Debt on a University Campus. *Midwestern Business and Economic Review* (44), 19-24.
- Harmel, R. D., Harmel, B., & Patterson, M. C. (2008). On-Farm Agro-Economic Effects of Fertilizing Cropland with Poultry Litter. *Journal of Applied Poultry Research*, 17 (4), 545-555.
- Patterson, M. C., Harmel, B., & Friesen, D. (2007). A Spreadsheet Solution to Einstein's Riddle. *International Journal of Technology, Policy, and Management*, 7 (1), 49-67.

- Patterson, M., Harmel, B., & Friesen, D. (2007). A Zero-One Spreadsheet Model. *Oil Gas and Energy Quarterly*, 56 (1), 85-102.
- Harmel, B., & Patterson, M. C. (2006). An Analysis of Real Estate Market Changes, United States 1989-2005. *Journal of Business and Economic Perspectives*, XXXII (2), 64-88.
- Patterson, M., & Harmel, B. (2006). A Regression Approach to Forecasting Sale Price of Single Family Residences in Wichita County Texas. *Journal of Property Economics*, 2, 61-72.
- Patterson, M., & Harmel, B. (2005). An Analysis of the Impact of Buffer Size on Profitability in a Drum-Buffer-Rope Environment. *Palmetto Review*, 8.
- Patterson, M., & Harmel, B. (2005). A Spreadsheet Approach to Solving Dynamic Programming Knapsack Problems. *Business Journal for Entrepreneurs*, 4, 22-32.
- Patterson, M., & Harmel, B. (2005). Solving the traveling salesman problem using Premium Solver Platform Software. *International Journal of Management*, 22 (4), 532-541.
- Patterson, M., & Harmel, B. (2003). Algorithm for Using Excel Solver for the Traveling Salesman Problem. *Journal of Education for Business*, 78 (6).
- Patterson, M., & Harmel, B. (2002). Algorithmic Approach for Solving Linear Programming Transportation Problems Using Microsoft Solver. *International Journal of Business Disciplines (IJBD)*, 12 (1).
- McMullen, M., Patterson, M., & Harmel, B. (2001). An Application of Theory of Constraints in Production and Marketing. *International Journal of Case Studies and Research*, 6 (1).
- Kaufman, D., Patterson, M., & Harmel, B. (2001). Implementation of TOC In an Engine Components Re_Manufacturing Company. *International Journal of Case Studies and Research*, 6 (1).
- Patterson, M., & Harmel, B. (2001). Using Microsoft Excel Solver for Linear Programming Assignment Problems. *International Journal of Management*, 18 (3).
- Gillespie, M., Patterson, M., & Harmel, B. (1999). TOC Beyond Manufacturing. *Industrial Management*.
- Patterson, M. (1998). A Simulation Analysis of Production Process Improvement. *Journal of Education for Business*.
- McMullen, M., Patterson, M., & Harmel, B. (1998). An Application of the Theory of Constraints in a Small Machine Shop. *International Journal of Management*.
- Petree, J., Patterson, M., & Harmel, B. (1998). Total Plant Production Efficiency. *International Journal of Business Disciplines (IJBD)*.
- Osten, S., Patterson, M., & Harmel, B. (1996). A Theory of Constraints Fable (Part One). *Industrial Management*.
- Osten, S., Patterson, M., & Harmel, B. (1996). A Theory of Constraints Fable (Part Two). *Industrial Management*.
- Patterson, M., & Harmel, B. (1996). Performance Measurement: A Review of the Approaches of Goldratt and Deming. *Journal of Business and Economic Perspectives*.
- Patterson, M., & Harmel, B. (1995). Manufacturing Base Maintenance and Labor Market Conditions Among States. *Central Business Review*.
- Patterson, M. (1994). Constraint Analysis in Profit Planning: An Empirical Comparison of Two Approaches. *International Journal of Management*.
- Patterson, M. (1993). Analysis of Set-up Time at Constraint Resources. *International Journal of Production Research*, 31 (4).
- Patterson, M. (1992). The Product Mix Decision: A Comparison of Theory of Constraints and Labor-Based Management Accounting. *Production and Inventory Management Journal*.
- Patterson, M., & Harmel, B. (1992). The Revolution Occurring in American Manufacturing. *Industrial Management*.
- Patterson, M. (1990). A Linear Programming Model for Solving Complex 2-Person Zero-Sum Games Problems. *Studies in Economic Analysis*.
- Patterson, M. (1990). A Review of the Principles of the Theory of Constraints. *Midwestern Business and Economic Review*.
- Patterson, M. (1989). Evaluation of Quantity Discounts Considering Rate of Return. *Production and Inventory Management Journal*.
- Patterson, M. (1989). Manufacturing Resource Planning Systems-Why They Fail. *Industrial Management*.
- Patterson, M. (1988). An Analysis of the Sensitivity of the EOQ Model to Quantity Discounts. *Excel - A*

Journal of Applied Business Research.

Patterson, M., & Hadley, G. (1988). Are Middle Paying Jobs Really Declining? Oklahoma Business Bulletin.

Patterson, M. (1986). Inventory File Accuracy: A Key Ingredient to Planning. Corporate Accounting.

Patterson, M. (1985). State Differentials in Unemployment Increases During Recessionary Periods. Central State Business Review.

Patterson, M. (1984). An Inventory Control Purchasing Simulation Model. Journal of Business Education.

Patterson, M. (1984). The Negative Income Tax: An Alternative to the Welfare System. Midwestern Business and Economic Review.

Patterson, M. (1983). Flat-Rate Personal Income Tax: Has Its Time Come? Midwestern Business and Economic Review.

Patterson, M. (1982). An EOQ Range Model. Journal of Purchasing and Materials Management.

Refereed Proceedings

Full Paper

Patterson, M., & Bimmerle, C. (1980). The Impact of Industrialization of the Quality of Life. National Academy of Management.

Patterson, M., & Bimmerle, C. (1979). The Impact of Manufacturing on Selected Aspects of the Economy of Wichita Falls. Association of American Geographers.

Book

Patterson, M. C. (1986). Management Science Programs for the IBM Personal Computer. Dubuque Iowa: Kendall Hunt.

Presentation of Non-Refereed Papers

International

Harmel, B. & Patterson, M. C. (2006-2007, February). Understanding Corporate Governance: An Interdisciplinary Approach to Teaching Ethics. American Society of Business and Behavioral Sciences, Las Vegas, Nevada.

Research Reports

2009-2010: Harmel, B., & Patterson, M., Decision Support Tool for Managing On-Farm Organic and Inorganic Nutrients for Sustainability., submitted to .

Commercial Software Developed

Software Revision

2008-2009: Management Science Programs for the IBM Personal Computer. Third Edition 2000 Revised & Updated for 32 bit systems summer 2009

Other Research Activities

Applied or Integrative/application Scholarship

2015-2016: Patterson, M., Beacon Lighthouse for the Blind.

2014-2015: Patterson, M., Beacon Lighthouse for the Blind.

2013-2014: Patterson, M., Beacon Lighthouse for the Blind.

2012-2013: Patterson, M., Beacon Lighthouse for the Blind.

2011-2012: Patterson, M., Beacon Lighthouse for the Blind.

2010-2011: Patterson, M., Beacon Lighthouse for the Blind.

2009-2010: Patterson, M., Beacon Lighthouse for the Blind.

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1992-1993: Patterson, M., Beacon Lighthouse for the Blind.

Service:

Service to the University

Department Assignments

Member:

2008-2009: Management Department
2005-2006 – 2008-2009: Management & Marketing Department

College Assignments

Chair:

2012-2013 – 2022-2023: Undergraduate Program Committee
2011-2012: Tenure and Promotion Committee
2006-2007 – 2007-2008: DCOBA Tenure and Promotion Committee

Member:

2017-2018 – 2022-2023: Marketing and Management Department
2012-2013 – 2022-2023: Tenure and Promotion Committee
2010-2011 – 2022-2023: Dillard College Faculty Meeting
2013-2014 – 2016-2017: Marketing Management and Legal Studies Department
2011-2012 – 2012-2013: Marketing Management Department
2010-2011 – 2011-2012: Undergraduate Program Committee
2010-2011: Management Department
2010-2011: Tenure and Promotion Committee
2010-2011: Faculty Development Committee
2009-2010: Undergraduate Program Committee
2009-2010: Tenure and Promotion Committee
2005-2006 – 2009-2010: Dillard College Faculty Meetings
2008-2009: Internal Affairs Committee
2007-2008 – 2008-2009: DCOBA Graduate Faculty
2005-2006 – 2008-2009: Undergraduate Curriculum Advisory Committee
2007-2008: Continuous Improvement Task Team
2006-2007: College Oversight Committee

College Assignments

Other Institutional Service Activities:

2011-2012: Dillard College of Business

2011-2012: Dillard College of Business

Member:

2010-2011: Faculty Development

University Assignments

Committee Member:

2011-2012 – 2012-2013: MSU Credit Union Audit Committee

2011-2012: University Core Curriculum

Service to the Community

Chair of a Committee

2020-2021: Dillard Coege of Business Undergraduate Committee

2019-2020: Dillar College of Business Undergraduate Committee Chairman

1990-1991 – 2004-2005: Beacon Lighthouse for the Blind, Board of Directors

1996-1997 – 1998-1999: Beacon Lighthouse for the Blind, Chairman Board of Directors

Member of a Committee

2020-2021 – 2023-2024: Board of Directors Beacon Lighthouse for the Blind (Secretary/Treasurer)

2019-2020: Secretary/Treasurer Board Beacon Lighthouse for the Blind

2012-2013 – 2019-2020: Beacon Lighthouse for the Blind

Positions Held in Civic Organizations

2005-2006 – 2011-2012: Beacon Lighthouse for the Blind, Board of Directors

1992-1993 – 1995-1996: Beacon Lighthouse for the Blind, Vice-Chairman Board of Directors

Honors-Awards-Grants

Honor

1973-1974: Delta Sigma Pi Key-Outstanding Graduate, Midwestern State University. Delta Sigma Pi Key-Outstanding Graduate

1973-1974: Outstanding Management Science Graduate, Midwestern State University. Outstanding Management Science Graduate