

## Curriculum Vitae

Mike Patterson

Dillard College of Business

- Management

Date of Hire: 1977

1649 Victory

Wichita Falls, Texas 76301

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## 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

2024-2025 - *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**

- Forrester, R., & Patterson, M. (in press, 2025). Math Puzzles as Optimization Models. *Business Education Innovation Journal*.
- Forrester, R. C., Martinez, J., & Patterson, M. (2024). Teaching business analytics: Do dogs know calculus? *Business Education Innovation Journal*, 16 (1), 122-128.
- 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. C., & Patterson, M. C. (2022). A Mathematical Model of Loyd's Archery Puzzle. *Business Education Innovation Journal*, 14 (1), 59-64.
- Forrester, R., & Patterson, M. (2022). The Bridge and Torch Problem: Developing Critical Thinking Skills with Puzzle-Based Learning. *Journal of Financial Education*, 48 (1).
- 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., & Friesen, D. (2010). A Spreadsheet Simulation of the Monty Hall Problem. *American Journal of Business Education*, 3 (2), 1-13.
- Patterson, M., & Harmel, B. (2010). The Coin Changing Problem as a Mathematical Model. *Journal of Applied Quantitative Methods*, 5 (2), 298-301.
- 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). Solving the traveling salesman problem using Premium Solver Platform Software. *International Journal of Management*, 22 (4), 532-541.
- 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. (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).
- Patterson, M., & Harmel, B. (2001). Using Microsoft Excel Solver for Linear Programming Assignment Problems. *International Journal of Management*, 18 (3).
- 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).
- 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*.  
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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 – 2024-2025: Undergraduate Program Committee

2011-2012: Tenure and Promotion Committee

2006-2007 – 2007-2008: DCOBA Tenure and Promotion Committee

##### **Member:**

2017-2018 – 2024-2025: Marketing and Management Department

2012-2013 – 2024-2025: Tenure and Promotion Committee

2010-2011 – 2024-2025: 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 College of Business Undergraduate Committee

2019-2020: Dillard 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