

## **ELLEN PARKER ALLEN, Ph.D.**

### **Education**

- Ph.D. Operations Research  
Southern Methodist University
- M.S. Operations Research  
Southern Methodist University
- B.A.S. Computer Science  
Southern Methodist University

### **Honors and Professional Affiliations**

- Named “Distinguished Professor” in the Cox School of Business by Delta Sigma Pi, the business fraternity
- Named the “Outstanding Faculty Member” at SMU by Paideia, the association of Greek students
- Recipient of the “Extra Mile” Award for going the extra mile to work with students who learn differently, 2011
- Recipient of Delta Sigma Pi Award for Outstanding Dedication to Teaching, 2008, 2010
- Recipient of the SMU “HOPE Professor” Award, 1999-2000, and 2005-2006
- Received Outstanding Faculty Award from SMU Panhellenic, 2005
- Mortar Board Faculty Award for “Outstanding Commitment to Students”, 2001
- Recognized by Edwin L. Cox School of Business for Outstanding Teaching in the BBA Program, 1999-2000, 2002-2003, 2004-2005, 2007-2008
- Tau Beta Pi (Engineering honorary)
- Omega Rho (Operations Research honorary)
- Alpha Iota Delta (Decision Sciences honorary)
- Recipient of the Fredrick E. Turman Award, 1981-1982
- Recipient of the SMU “M” Award
- Selected Outstanding Graduate Student in Operations Research, 1980-1981
- INFORMS, member
- Refereed for *Operations Research Letters*

### **Work Experience**

**1985 - present**

**Clinical Professor of Information Technologies and Operations Management  
E. L. Cox School of Business, and  
Adjunct Professor  
Lyle School of Engineering  
Southern Methodist University  
Dallas, Texas**

Responsible for teaching graduate and undergraduate level Operations Research, Computer Science, Operations Management and Management Science courses.

#### **Courses Taught:**

“Business Modeling with Spreadsheets,” a senior-level course, geared toward accounting and other majors. Equips students to create Excel-based modeling systems for use in accounting applications, financial applications, and other areas.

- “Business Computer Programming,” an undergraduate course in Visual Basic 6.0 Programming
- “Database Design and Administration,” an undergraduate course in relational databases. Emphasis on design and normalization techniques. Physical design topics covers Microsoft Access, including SQL.
- “Operations Research Models,” a graduate level survey of optimization techniques covering discrete and continuous models including Linear Programming, Integer Programming, Networks, Stochastic Processes, Dynamic Programming and Inventory Control.
- “Quantitative Models,” a graduate level elective for MBA students, covering a variety of mathematical programming techniques (including linear programming, integer programming, network programming, nonlinear programming) and computer simulation. Emphasis on modeling and interpretation of results.
- “Computer Simulation,” a graduate level course covering discrete simulation models, emphasizing model building and analysis. (Uses SLAM II)
- “Operations Management,” an undergraduate survey of quantitative methods used in business. Course covers linear programming, forecasting, inventory models, aggregate planning, project management, process analysis and decision analysis.
- “Applications Programming: Tools and Techniques,” a graduate level Computer Science course covering data structures and programming techniques (structured programming, modular programming, debugging and antidebugging techniques) for applications programming. (Students are typically M.S. and Ph.D. candidates in engineering.)
- “Statistics for Managers,” a graduate level course for MBA students. Covers various quantitative methods used in management including forecasting, inventory analysis, project management techniques, decision analysis, and linear programming.
- “Management Decision Making,” an introductory level O.R. survey course for undergraduates.
- “Introduction to Computer Science,” an introductory course in FORTRAN for undergraduate engineering students.

**1988 – 1993**

**Lecturer II  
School of Management  
The University of Texas at Dallas  
Richardson, Texas**

Responsible for teaching operations research techniques to undergraduate business students and graduate operations research students.

Course Taught:

- “Linear Programming,” a graduate course which covers linear programming models, solution techniques, sensitivity analysis, and optimization theory.
- “Project Management,” an undergraduate operations management course which covers inventory management, materials requirements planning, forecasting, decision analysis, and PERT/CPM.

“Operations Research,” an undergraduate survey of O.R. techniques covering problem formulation and solution strategies for linear programming problems, transportation and assignment problems, network problems and simple queuing models.

**1980-1985**                      **Graduate Assistant**  
**Department of Operations Research**  
**Southern Methodist University**  
**Dallas, Texas**

**1976-1979**                      **Marketing Representative**  
**Data Processing Division**  
**IBM Corporation**  
**Dallas, Texas**

### **Publications**

- “Reoptimization Procedures for Bounded Variable Primal Simplex Network Algorithms” (with A. I. Ali, R. S. Barr and J. L. Kennington) *European Journal of Operations Research*, 23 (1986) 256-263. (Presented at ORSA/TIMS in Orlando, Florida, 1983)
- Using Two Sequences of Pure Network Problems to Solve the Multicommodity Network Flow Problem, (Dissertation, 1985)
- “A Generalization of Polyak's Convergence Result for Subgradient Optimization” (with R. V. Helgason, J. L. Kennington and B. B. Shetty) *Mathematical Programming*, 37 (1987) 309-317.

### **Sponsored Research**

“Development and Evaluation of a Casualty Evacuation Model for a European Conflict” September 1, 1983 - August 31, 1984, \$50,000. (J. Kennington - Principal Investigator)