

Curriculum Vita
of
RICHARD EHRHARDT

June 2007

Personal Data

Born: 12 December 1946, New York, New York

Home Address: 1814 Borland Road
Hillsborough, NC 27278
(919) 929-6963

Office Address: Department of Information Systems and Operations Management
Bryan School of Business and Economics
University of North Carolina at Greensboro
Greensboro, NC 27412-5001
(910) 334-4986
r_ehrhardt@uncg.edu

Education

1973-76 MA, Ph.D., Administrative Sciences: Yale University

1970-71 MS, Nuclear Engineering: University of California, Berkeley

1967-69 MS, Physics: University of Massachusetts, Amherst

1963-67 BS, Physics: The Cooper Union, New York, New York

Employment History

1998 - present Professor, The University of North Carolina at Greensboro, Bryan School of Business and Economics.

1985 - 1997 Associate Professor (with tenure), The University of North Carolina at Greensboro, Bryan School of Business and Economics.

1997 - 2001 Director, MBA Program, The University of North Carolina at Greensboro, Bryan School of Business and Economics.

1987 - 1991 Department Head, Information Systems and Operations Management, The University of North Carolina at Greensboro, Bryan School of Business and Economics

1982 - 1985 Assistant Professor, The University of North Carolina at Greensboro, Bryan School of Business and Economics.

1981 - 1982	Visiting Assistant Professor, The University of North Carolina at Chapel Hill, School of Business Administration.
1977 - 1981	Assistant Professor, The University of North Carolina at Chapel Hill, Curriculum in Operations Research and Systems Analysis.
1976 - 1977	Instructor, The University of North Carolina at Chapel Hill, Curriculum in Operations Research and Systems Analysis.
1972 - 1973	Reactor engineer, U.S. Atomic Energy Commission. Monitored nuclear reactor safety programs.
1971 - 1972	Reactor engineer, Argonne National Laboratory (on assignment from U.S.A.E.C.). Conducted safety research for advanced reactor systems.
1969 - 1970	Reactor engineer, U.S. Atomic Energy Commission. Monitored advanced reactor development programs.

Publications

Doctoral Dissertation:

(s, S) *Inventory Policies with Limited Demand Information*, December 1976, advisor: H. M. Wagner, 256 pp.

Books:

Instructor's Manual for *Principles of Operations Research and Principles of Management Science* by Harvey M. Wagner (manual co-authored with Arthur Estey). New York: Prentice-Hall, 1975, 488 pp.

Project Management Using SAS/OR Software (manual for two-day course, co-authored with Marc Cohen). Cary: SAS Institute, Inc., 1989, 275 pp.

Articles:

1. Ehrhardt, R. (1979). The power approximation for computing (s, S) inventory policies. *Management Science*. pp. 777-786.
2. Ehrhardt, R. (1981). Analytic approximations for (s, S) inventory policy operating characteristics. *Naval Research Logistics Quarterly*. pp. 255-266.
3. Schultz, C. R., Ehrhardt, R. & Wagner, H. M. (1981). (s, S) policies for a wholesale inventory system. *TIMS Studies in the Management Sciences*. pp. 145-161.
4. Ehrhardt, R. (1981). Operations planning. In *Kirk/Othmer Encyclopedia of Chemical Technology, Third Edition* (pp. 500-522). New York: John Wiley & Sons, Inc.
5. Ehrhardt, R. & Wagner, H. M. (1982). Inventory models and practice. In *Advanced Techniques in the Practice of Operations Research* (pp. 250-332). New York: North-Holland Publishing Company.

6. Ehrhardt, R., Mitchell, J. C. & Wagner, H. M. (1982). Aggregate service in a multi-item inventory system. *Proceedings of the Second International Conference on Inventories*. Budapest, Hungary.
7. Ehrhardt, R. (1983). Variance reduction techniques for (s, S)-type inventory simulations. *Simulation in Inventory and Production Control*. pp. 12-16.
8. Ehrhardt, R. & Mosier, C. (1984). A revision of the power approximation for computing (s, S) policies. *Management Science*. pp. 618-622.
9. Ehrhardt, R. (1984). (s, S) policies for a dynamic inventory model with stochastic lead times. *Operations Research*. pp. 121-132.
10. Ehrhardt, R. (1985). Operations planning. In *The Concise Encyclopedia of Chemical Technology* (p. 819). New York: John Wiley & Sons, Inc.
11. Ehrhardt, R. (1985). Easily computed operating characteristic approximations for (s, S) inventory systems. *Naval Research Logistics Quarterly*. pp. 347-360.
12. Ehrhardt, R. & Taube, L. (1987). An inventory model with random replenishment quantities. *International Journal of Production Research*, pp. 1795-1803.
13. Ehrhardt, R. (1988). Indifference functions for price-adjusted acceptance sampling. *IIE Transactions*. pp. 68-72.
14. Baker, H. & Ehrhardt, R. (1995). A dynamic inventory model with random replenishment quantities. *Omega*. pp. 109-116.
15. Ehrhardt, R. (1995). Finished goods management for just-in-time production: new models for analysis. *Proceedings of the International Conference on Industrial Engineering and Production Management II*, Marrakech, Morocco. pp. 531-539.
16. Ehrhardt, R. (1996). A dynamic model of JIT make-to-stock inventory with stochastic demand. *Proceedings of the Fifth International Conference on Computer Integrated Manufacturing and Automation Technology, CIMAT'96*, Grenoble, France. pp. 364-369.
17. Ehrhardt, R. (1998). Finished goods management for J.I.T. production: new models for analysis. *International Journal of Computer Integrated Manufacturing Vol 11, No.3*. pp. 217-225.
18. Ehrhardt, R. (1998). A model of JIT make-to-stock inventory with stochastic demand. *Journal of the Operational Research Society Vol. 48*. pp. 1013-1021.

Conference Papers

Presentations at Major Conferences:

1. Ehrhardt, R. & Wagner, H. M. (1976, May). New numerical approximations for inventory replenishment policies. Joint National ORSA/TIMS Meeting. Philadelphia, PA.
2. Ehrhardt, R. (1977, May). Operating characteristic approximations for the analysis of (s, S) inventory systems. Joint National TIMS/ORSA Meeting. San Francisco, CA.

3. Ehrhardt, R., MacCormick, A. & Schultz, C. R. (1977, November). Forecasting inventory policy operating characteristics. Joint National ORSA/TIMS Meeting. Atlanta, GA.
4. Ehrhardt, R. (1978, May). Correcting for bias in inventory cost forecasts. Joint National TIMS/ORSA Meeting. New York, NY.
5. Ehrhardt, R. (1978, November). Fine tuning an analytically derived approximation for an inventory problem. Joint National ORSA/TIMS Meeting. Los Angeles, CA.
6. Ehrhardt, R. (1979, May). Heuristic (s, S) policies for problem demand distributions. Joint National TIMS/ORSA Meeting. New Orleans, LA.
7. Ehrhardt, R. & Wagner, H. M. (1979, May). Inventory management in a statistical environment. Joint National TIMS/ORSA Meeting. New Orleans, LA.
8. Ehrhardt, R. & Wagner, H. M. (1979, October). Variance reduction techniques for an inventory simulation. Joint National ORSA/TIMS Meeting, Milwaukee, WI.
9. Ehrhardt, R. & Wagner, H. M. (1980, November). Inventory models and practice. Joint National ORSA/TIMS Meeting. Colorado Springs, CO.
10. Ehrhardt, R. (1981, May). (s, S) policies for a dynamic inventory model with stochastic lead times. Joint National TIMS/ORSA Meeting. Toronto, Ontario, Canada.
11. Ehrhardt, R. & Mitchell, C. R. (1982, April). Single-item service objectives in a multi-item inventory system. Joint National TIMS/ORSA Meeting. Detroit, MI.
12. Ehrhardt, R. & Mitchell, J. C. (1982, October). Single-item service objectives in a multi-item system. Joint National ORSA/TIMS Meeting. San Diego, CA.
13. Ehrhardt, R. (1983, January). Variance reduction techniques for (s, S)-type inventory simulations. National Conference of the Society for Computer Simulation. San Diego, CA.
14. Ehrhardt, R. (1983, November). Inventory management with random replenishments. Joint National ORSA/TIMS Meeting. Orlando, FL.
15. Ehrhardt, R., Mitchell, C. R. & Wagner, H. M. (1983, November). A multi-item (s, S) inventory system with a single service objective. Joint National ORSA/TIMS Meeting. Orlando, FL.
16. Ehrhardt, R. & Hailey, W. A. (1984, May). Price-adjusted sampling plans in quality control. Joint National ORSA/TIMS Meeting. San Francisco, CA.
17. Ehrhardt, R. & Taube, L. (1986, April). A dynamic inventory model with random replenishment quantities. Joint National TIMS/ORSA Meeting. Los Angeles, CA.
18. Ehrhardt, R. & Wagner, H. M. (1986, October). A Practical View of Inventory Theory. An invited tutorial at the Joint National ORSA/TIMS Meeting. Miami, FL.
19. Ehrhardt, R. & McClelland, M. (1987, May). Approximately optimal policies for a dynamic inventory model with random replenishment quantities. Joint National TIMS/ORSA Meeting. New Orleans, LA.

20. Ehrhardt, R. (1994, October). Finished goods management models for JIT production. Joint National ORSA/TIMS Meeting. Detroit, MI.
21. Ehrhardt, R. (1995, October). A dynamic model of JIT finished goods management. National INFORMS Meeting. New Orleans, LA.
22. Ehrhardt, R. (1996, May). The robustness of a simple heuristic for a random yield inventory model. National INFORMS Meeting. Washington, DC.
23. Ehrhardt, R. (1997, January). Modeling JIT finished goods management. NSF Design and Manufacturing Grantees Conference. Seattle, WA.
24. Ehrhardt, R. (1997, July). A dynamic model of JIT make-to-stock inventory with stochastic demand. EURO/INFORMS Joint International Meeting. Barcelona, Spain.
25. Ehrhardt, R. & Dennett, J.R. (1997, August). The standing order inventory problem. International Society for Inventory Research Summer Conference. Ioannina, Greece.
26. Ehrhardt, R. & Dennett, J.R. (1998). A standing order inventory problem with stochastic demand. INFORMS-Israel International Meeting, Tel Aviv University, 1 July 1998.
27. Peterson, D., Wagner, H.M. & Ehrhardt, R. (1998). The (s,S) periodic review inventory model under low mean demand and the impact of constrained reorder points. Proceedings of the November 1998 DSI National Conference.
28. Peterson, D., Wagner, H.M. & Ehrhardt, R. (1999). A comparison of constrained, approximately optimal (s,S) inventory model under low mean demand. Proceedings of the November 1999 DSI National Conference.
29. Peterson, D., Wagner, H.M. & Ehrhardt, R. (2000). Predicting inventory system operating characteristics under low mean demand and constrained reorder points. Proceedings of the November 2000 DSI National Conference.
30. Eatman, J., Ehrhardt, R. & Gargeya, V. (2006). Supply chain metrics and the multi-vendor global supply chain. Proceedings of the International Conference on Information Systems, Logistics and Supply Chains, Lyon, France.
31. Ehrhardt, R. A., (2006). Describing Service in Independent Demand Inventory Systems. WSEAS Transactions on Business and Economics.
32. Singh, R., D'Aubeterre, F., Iyer, L., Salam, A. & Ehrhardt, R. (2007). Secure semantic eBusiness processes: a design theoretic approach to secure semantic systems, Proceedings of the 2nd International Conference on Design Science Research in Information Systems and Technology. Pasadena, CA.

Other Invited Talks:

1. Ehrhardt, R. (1979, November). Panelist in "Inventory Models and Practice." Joint National ORSA/TIMS Meeting. Los Angeles, CA.
2. Ehrhardt, R., MacCormick, A. & Wagner, H. M. (1978, November). (s, S) policies at an upper-echelon facility. Conference on Multi-echelon Inventory Systems. The George Washington University.

3. Ehrhardt, R., Schultz, C. R. & Wagner, H. M. (1979, May). (s, S) policies for a wholesale inventory system. Conference on Multi-level Production/Inventory Systems, Purdue University.
4. Ehrhardt, R. (1980, April). Inventory models and practice. Colloquium given for the North Carolina State University Curriculum in Operations Research. Raleigh, NC.
5. Ehrhardt, R. (1980, June). Stochastic lead times in a multi-echelon system. Conference on Multi-echelon Inventory Systems. The University of North Carolina at Chapel Hill. Chapel Hill, NC.
6. Ehrhardt, R. (1996, October). Finished goods management models for JIT production. Operations Management Seminar Series, Fuqua School of Business, Duke University. Durham, NC.

Professional Activities

Membership in Professional Societies:

Institute for Operations Research and the Management Sciences (INFORMS)
Member of the National INFORMS Prize Committee, 1996, 1997.

Grants:

Decision Control Models in Operations Research. Sponsored by the U.S. Army Research Office and the Office of Naval Research, 1976-84 (co-principal investigator with H. M. Wagner).

Decision Control Models in Operations Research. Sponsored by the National Science Foundation, 1985-87 (co-principal investigator with H. M. Wagner).

Product Life Cycles in Inventory Control. UNCG Excellence Foundation Summer Research Grant, 1988.

Finished Goods Management Models for JIT Production. Sponsored by the National Science Foundation, 1996-99.

Professional Development:

1. Master Teacher Program, Georgia State University College of Business Administration, Atlanta, GA. Attended a one-week workshop on teaching effectiveness, December 12-17, 1991.
2. Teaching with Technology: An Overview, Institute for Academic Technology, Research Triangle Park, NC. Attended a one-day seminar on interactive multimedia and networking technologies for instruction, January 25, 1993.
3. UNCG Race and Gender Institute. Participated in a five-day workshop about issues of race and gender. May 16-20, 1994.
4. Faculty Development in International Business. Attended University of South Carolina's five-day workshop on international business. May 23-27, 1994.
5. Teaching the Art of Mathematical Modeling. Attended workshop at Joint National ORSA/TIMS Meeting. October 23, 1994.
6. Faculty Development in International Business. Participated in Texas A&M's ten-day program at various sites in Mexico. May 14-24, 1996.
7. Three-day SAP workshop at SAP's training center in Boston. July 26-28, 1999.
8. The Teaching of Management Science. Participated in a three-day INFORMS-sponsored workshop at Indiana University. June 11-13, 2000.
9. Seminar on Management of Complex Systems. Attended a workshop sponsored by the New England Complex Systems Institute, Washington, D.C. 2005.
10. SAS Conference on Business Forecasting, Cary, North Carolina. 2006.

Teaching

The University of North Carolina at Chapel Hill:

Undergraduate courses: Calculus, Business management simulation.

Graduate courses: Inventory theory, Stochastic models of operations research, Operations research models in finance, Seminar in Markov decision processes, Student seminar.

Graduate student supervision: Served on approximately ten doctoral dissertation committees, chairing one. Supervised approximately ten masters degree expository papers.

The University of North Carolina at Greensboro:

Undergraduate courses: Business computing I, Quantitative business analysis, Management simulation, Production and inventory control, Operations management.

Graduate courses: Research methods, Operations research, Topics in operations research, Management science, Advanced management science, Project management, Business statistics, Advanced business statistics.

Graduate student supervision: Served on one masters degree thesis committee and one doctoral dissertation committee.

International Teaching

The University of Hull, Hull, England. Taught Operational Research Techniques and participated in faculty activities as a Visiting Scholar (1995).

University of Applied Sciences, Ludwigshafen, Germany. Regularly teach a short management science course at the MBA level (1999 – 2006).

Ecole Superiure des Affaires, Universite Pierre Mendes France, Grenoble, France. Taught four classes in management science to executive MBA participants (2001 – 2004).

Copenhagen Business School, Copenhagen, Denmark. Taught an MBA elective in management science during summer session (2002).

Executive/managerial Education:

IBM Corp., Research Triangle Park, NC. Organized, coordinated and team-taught "Manufacturing Science," a multidisciplinary course for managers: 1982-84.

Columbia University, New York, NY. Led sessions entitled "Managing Material Resources." Executive Education Program in Operations Management: 1988, 1990, 1991.

SAS Institute, Inc., Cary, NC. Designed and taught an intensive two-day course entitled "Project Management Using SAS/OR Software," and consulted on publications, 1989-93.

UNCG, Bryan School of Business and Economics, Greensboro, NC. Led sessions on forecasting, project management and decision analysis. Program for Management Development: 1990-94, 1996-07.

RF Microdevices, Inc., Greensboro, NC. Designed and taught a short course in project management, 1999-2000.

University Service

University committees:

Traffic Committee, 1984-87, chair 1986-87.
Academic Cabinet, 1985-87.
Traffic Appeals Board, 1986-87.
Planning Committee, 1986-87.
Steering Committee on Parking and Traffic, 1986-88.
UNCG Delegate to UNC Faculty Assembly, 1987-88, 2001-03, 2005-06.
Mathematics Area Instruction Committee, 1988-94.
Ad Hoc Committee on Faculty Government, 1989-90.
Faculty Senate, 1991-94, 97-00.
Faculty Senate Bylaws Committee, 1991-94 & 96-97, chair 1991-93 & 97-00.
Committee on Faculty Development in Race and Gender Studies, 1995-98.
Human Relations Council, 1997-2003.
Academic Advisory Board, Center for Global Business Education and Research, 1997-98
SACS Self-study Subcommittee on University Outreach, chair 2000-2003.
Advisory Committee on International Programs, 2000-2006.
Campus Unity Council, founding member, 2003-2006.

School committees:

SBE Committee on Committees, 1984, 85, 87.
Academic Planning, 1984-85.
Committee for Summer Research Grants, 1985-88.
Executive Council, 1987-91, 1992-94.
Dean's Committee, 1987-91, 1997-01.
Promotion and Tenure, 1987-93, 00-01, 02-04, chair 1991-92.
MBA Program Committee, 1989-07, chair 1997-01.
Dean Search Committee, chair 1990-91.
MBA Self Study Steering Committee, 1991-93, chair 1991-92.
MBA Self Study Committee, chair 1991-92.
Unit Planning Committee, 1994.
MBA Curriculum Review Committee, chair 1996-97.
Faculty Governance Task Force, 1996-97.
Director, MBA Program, 1997-2001.
Graduate Programs Committee, 1997-2001.
Diversity Commission 1999-2005, chair 2002-05.
Planning Committee, 2002-03, 2006-07.