# Thomas M. Zachariah

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### **EDUCATION:**

Claremont Graduate University: Ph.D. (1984) in Mathematics (Geometric Probability)

MA (1980) in Mathematics

## **TEACHING EXPERIENCE:**

1994 – present: Associate Professor, Department of Mathematics,

Loyola Marymount University, Los Angeles, California 90045.

1988 – 1994: Assistant Professor, Department of Mathematics,

Loyola Marymount University, Los Angeles, California 90045.

1986 – 1987: Senior Lecturer. Applied Sciences Department

Guru Nanak Dev Engineering College, Bidar, India.

1984 – 1985: Visiting Assistant Professor. Department of Mathematics,

University of Alaska, Fairbanks, Alaska.

### **SELECTED COURSES TAUGHT:**

Calculus I, II, and III, Mathematics Analysis for Business I and II, Mathematics for Elementary School Teachers I & II, Mathematical Modeling, Numerical Analysis, Ordinary Differential Equations, Operations Research, Probability and Statistics, Elementary Statistics, and Workshop in Mathematics I & II.

### **CURRENT RESEARCH INTERESTS:**

Mathematical modeling, geometrical probability and isoperimetric inequalities, integration of computing in teaching mathematics.

#### SELECTED PUBLICATIONS AND PRESENTATIONS:

Learning Quantitative Skills Through Local Civic Problems, Presentation with J. Dewar and S. Larson at the Lilly West Conference on College and University Teaching – West, Pomona, CA, March 18, 2006.

Incorporating Civic Engagement in Quantitative Literacy Courses: A Preliminary Report, Presentation with J. Dewar and S. Larson at the Joint Mathematics Meetings, San Antonio, TX, January 14, 2006.

A Report on an Online Course for Non-Science Majors, Proceedings of the Fifteenth International Conference on Technology in Collegiate Mathematics, Vol. 15, 2003.

Developing Successful Math Majors: A two-Semester Course Sequence – Instructor's Manual, Jackie Dewar, Suzanne Larson, and Thomas Zachariah, manuscript completed, 2000.

Issues in Teaching an Undergraduate Math Modeling Course, Presentation at the Mathematical Association of America Southern California Section Meeting, fall 2000, Whittier College, California.

Mathematical Modeling Using Mathematica, Presentation at the Second Biennial Symposium on Mathematical Modeling in the Undergraduate Curriculum, University of Wisconsin, La Crosse, June 1996.

Mathematics and Computing Technology, Presentation at the Seventh Annual International Conference on Technology in Collegiate Mathematics held in November 1994.

An Introduction to Simulations in Modeling, COMAP modules, co-authored with Robert Blatz, John Currano, KLD Gunawardena, Robert Nelson, and Dan Yates, July 1992.

#### **External Grants:**

Summer Research Experience for Community College Professors/K-12 Teachers, NSF, Summer 2003, involvement as a researcher.

Developing Successful Math Majors: A Two-Semester Course Sequence – Instructor's Manual, LACTE, Summer 2000, involvement as a course developer together with Jackie Dewar and Suzanne Larson.

An Introduction to Probability and Statistics – Instructor's Manual, LACTE, Summer 2000, involvement as a course developer together with Suzanne Larson.

*Mathematics Using Mathematica*, NSF Instrumentation and Laboratory Improvement Program, 2002- 2004, involvement as the principal investigator.

*Mathematical Modeling and Mathematica*, Wolfram Research Inc., August 1992, involvement as the principal investigator.