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CURRICULUM VITA
GERALD M. ARMSTRONG

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PERSONAL

Born: Ephraim, Utah
Citizenship: U.S.A.

EDUCATION

Brigham Young University, B.S., 1963
Brigham Young University, M.S., 1965
University of Wisconsin, Madison, Ph.D., 1971

MATHEMATICS AREAS OF PROFICIENCY

Classical Integration and Differentiation Theory
Mathematics Models in Medicine
Calculus Reform

PROFESSIONAL EXPERIENCE

Instructor, Brigham Young University, 1970-1971
Assistant Professor, Brigham Young University, 1971-1975
Associate Professor, Brigham Young University, 1975-present
Chairman, Quantitative Skills Subcommittee of the BYU General Education Council, 1972-1974
Graduate Coordinator, 1976-1978
Undergraduate Coordinator, 1978-1980
BYU Faculty Advisory Council, 1979-1981
Scheduling Officer, 1980-1981
BYU-Hawaii, Visiting Faculty, 1981-1982
Chairman, Curriculum Committee, 1983-1985
Calculus Coordinator, 1987-1990
Graduate Coordinator, 1990-1994
Mathematics Department Associate Chair, 1992-1994
Mathematics Department Chair, 1994-1997
Recruitment Committee, 1997-1999

Math 119 Supervisor, 1998-1999
Math 110 Coordinator, 1999-2000
Chair, Department of Mathematics Education, 2000-present

GRANT

Co-PI, Implementation and Dissemination of the Harvard Consortium Materials in Arizona, Oklahoma and Utah, subcontract to the University of Arizona, NSF Grant DUE-9252521, 1992-1995 (with Charles Walter and Lynn Garner).

PI, Fully Renewed Calculus at Three Large Universities, NSF Grant DUE-9253959, 1992-1995 (replaced G.S. Gill, with William Smith and Ted Wight).

PI, Expansion of Reformed Calculus Using Computer Lab Projects, NSF ILI Grant DUE-9352083 (with Charles Walter, Lynn Garner, William Smith, Ted Wight).

MEMBERSHIPS

Mathematics Association of American

AWARDS

Alcuin Fellows Award, 1994-97

PUBLICATIONS

1. A Classical Approach to the Denjoy Integral by Parametric Derivatives, *J. London Math. Soc.* (2) **3** (1971), 346-349
2. A Preliminary Proposal for a Basic Mathematics Competency Level, B.Y.U. (1973), 1-43.
3. An Extension of an Optical Control Sufficiency Theory, *SIAM J. Control*, **12** No. 4 (1974), 650-654.
4. (with Midgley, C. P., and Sommer, R. W.) An Alternative to Conization: Semilunar Biopsy-Repair, *Clinical Medicine* **82**, I (1975), 13-18.
5. (with Midgley, C. P., and Sommer, R. W.) Incidence of Cervical Cancer Following Semilunar Biopsy-Repair: A Statistical Comparison with Other Cancer Studies, *Clinical Medicine* **82** 3(1975), 13-17.
6. (with Midgley, C. P.) Surgical Prevention of Cancer of the Uterine Cervix, *Clinical Medicine,* **84** (1977), 16-22.
7. Properties of a General Integral Equivalent to the Denjoy-Perron Integral, *Tamkang J. Mathematics,* **17** No. 4 (1986).
8. (with Midgley, C. P.) The Exponential-Decay Law Applied to Medical Dosages, *Mathematics Teacher,* **80** No. 2 (1987), 110-113
9. Some Projects for Calculus and Analysis, PRIMUS, **1** No. 3 (September 1991), 275-286.

10. (with Lamoraeux, J. W.) A Necessary and Sufficient Condition for Gauge Integrability, *Real Analysis Exchange*, **19** No. 1 (1993-94), 254-256.
11. (with Garner, L. and Wynn, J.) Our Experience with Two Reformed Calculus Programs, *PRIMUS,* **IV** (4) (December 1994), 301-311.
12. (with Lamoreaux, J. W.) The Fundamental Theorem of Calculus for Gauge Integrals, *Mathematics Magazine,* **71** (3) (1998).
13. (with Hendrix, Lee J.) Does Traditional or Reformed Calculus Prepare Students Better for Subsequent Courses? A Preliminary Study, *Journal of Computers in Mathematics and Science Teaching,* **18** No. 2 (1999), 95-103.