

Curriculum Vita

Harry S. Mills
604 North 12th Street
Gunnison, Colorado 81230
smills@western.edu
970-943-3234

Work Summary

Visiting Professor, Temporary Lecturer, Graduate Teaching Assistant, Undergraduate Research Assistant, Mathematical Research Programmer, Web Programmer, UNIX System Programmer.

Work Experience

August, 2000 - May 2005

Visiting Professor
Western State College of Colorado, Gunnison, CO

Description

Teaching 12 to 15 credit-hours (typically 3 course preps) per semester; serving on department committees; participating in General Education and Program Assessment cycles: formulating the assessment matrix for Finite Math, and collaborating with other department members on Algebraic Functions, Statistics and the Senior Capstone Seminar;; advising Senior Capstone students 1-on-1; consulting with faculty in other departments on General Education needs and priorities, and initiating and developing the use of spreadsheets in Finite Math courses; co-advisor to the Math Club; Chess Club advisor

Courses taught include Finite Mathematics, Algebraic Functions, Calculus I, Linear Algebra, Differential Equations, Complex Analysis and Senior Capstone Seminar.

August 23, 1999 - May 16, 2000

Temporary Lecturer
University of Idaho, Moscow, Idaho.

Description

Carrying a teaching load of 12 credits per semester.
Courses taught include Survey of (Applied) Calculus, Calculus I and Calculus II.

May 1996-March, 1997

Internet Systems Programmer and Help Desk Coordinator
Lewis Clark State College, Lewiston, Idaho - Telecommunications and Information Infrastructure Assistance Program, National Telecommunications and Information Administration (TIIAP/NTIA), U.S. Department of Commerce.

Description

UNIX System-, CGI- and HTML-Programming. Startup operation of an Internet Help Desk and communication and coordination hub for a rural Internet Service Provider, and training personnel to perform these operations on a permanent basis.

August 1989 - May 1996, August 1998 - May 1999

Graduate Teaching Assistant
Department of Mathematics, University of Idaho, Moscow, Idaho

Description

Carrying a teaching load of 9-12 credits per academic year.
Courses taught include Differential Equations, Calculus I, II, Finite Mathematics, College Algebra and Intermediate Algebra.

1987-May 1996

Adjunct Faculty

Division of Natural Sciences and Mathematics, LCSC

Description

Interdisciplinary and experimental courses implementing technology in the classroom as early as 1990. I have utilized computer algebra systems as an integral part of instruction in mathematics for well over a decade. Systems used include Maple, Mathematica, MACSYMA and DERIVE running on multiple platforms, including Sun OS, Macintosh and Microsoft Windows. Unix System Programming. Web development for various LCSC offices and events, including the Office of Admissions, the Office of College Research, and Tscemicum Regional Connection.

May-October 1990

Research Assistant

LCSC, Idaho SBOE Grant 88-068

Description

Wrote MACSYMA batch files that computed the 2nd fundamental forms of tubes embedded in Riemannian manifolds, which assisted Dr. Micheal Vernon in classifying tubal hypersurfaces.

Education

1999 PhD in Mathematics, University of Idaho.

1991 MS in Mathematics, University of Idaho.

1987 BS in Mathematics, Lewis Clark State College.

1986 BS in Geology, Lewis Clark State College.

Publications, Presentations and Awards

How I Teach Mathematics for Business, Proceedings of the Mountain Plains Management Association, Grand Junction, CO., October, 2004

More Spreadsheets in Finite Mathematics, Contributed papers session, Rocky Mountain Section of the Mathematical Association of America, April, 2004.

Fourier Series and Inner Product Spaces, MAPLE Seminar, Western State College of Colorado, March, 2002.

Using Spreadsheets in Finite Mathematics, Contributed Papers Session, Rocky Mountain Section of the Mathematical Association of America, April, 2001.

Positive Solutions to a Second-Order Boundary Value Problem, Doctoral Dissertation (1999).

Excellence in Teaching Award, University of Idaho, 1999.

Symbolically Precise Solutions to a Homogeneous Second Order Matrix Ordinary Differential Equation with Macsyma, Journal of Symbolic Computation (1993) 15 91-98.

Using MACSYMA to Calculate the Extrinsic Geometry of a Tube in a Riemannian Manifold, Computers and Mathematics, Springer-Verlag (1989), 269-278.

1987 - *Using Cubic Splines to Create 3-D Images from Topographic Map Data*, Idaho Academy of Sciences.

1986 - "Who's Who" in American Colleges and Universities, Lewis Clark State College.

1985 - *The Method of Multiple Working Hypotheses*, Idaho Academy of Sciences. Won the award for best student presentation.

1985 - *A Paleomagnetic Survey of Columbia River Basalt at Gauging Station Gulch*. Senior Research Project and Poster Exhibition, Lewis Clark State College.

Professional Associations

Member in good standing with the Mathematical Association of America and the American Mathematical Society