

Curriculum Vitae

Doug Bradley-Hutchison

Education

<u>Institution</u>	<u>Degree</u>	<u>Major Field</u>	
Montclair State College Montclair, New Jersey	B.S.	Physics	1983
University of New Hampshire Durham, New Hampshire	M.S.	Physics	1987

Thesis Title: *Chaos in the One-Dimensional ϕ^4 Model: A Numerical Study*

Later formed basis of :*A Numerical Study of Chaos in the One-Dimensional ϕ^4 Model*
(with H. Shepard), *Physica Scripta*,**40**,(1989)

Employment History

1983-1987	University of New Hampshire Durham, New Hampshire	Teaching Assistant, Research Assistant, Instructor
1986-1987	School for Lifelong Learning (University of New Hampshire)	Instructor
1987-Present	Sinclair Community College	Assistant Professor 1987-91 Associate Professor 1991-96 Professor 1996-Present

Selected Accomplishments

2006-Present *Senior Personel* NSF Funded “Step: Gateway into first-year STEM curricula: a community college/university collaboration promoting retention and articulation”. (Wright State University with Sinclair Community College).

2004-Present *Coordination of Science Curriculum Development*
Associate Degree Programs in Education (ECE/MCE) at Sinclair Community College.

1995-96 *Awarded (with C. Hinds) Learning Challenge Grant (Sinclair Community College)*
Developed curriculum materials to teach algebra-based physics course without lecture/discussion using collaborative learning and inquiry.

1992-96 *Member of Project Gemma (later Wright Connection) Academic Team:*
Summer internship program for K-12 science/math teachers working at industrial/government R&D sites.

1990-91 *Awarded Grant from Ohio Supercomputer Center*
Research in nonlinear dynamics.
Phase Plane Analysis of a Nonintegrable Classical Field (unpublished)

Curriculum Development

Computational Physics: “Studying Oscillators through Numerical Experimentation” for the Ralph Regula School of Computational Science (NSF funded Ohio statewide initiative).

Laboratory: Numerous laboratory and/or collaborative group curriculum materials.

Honors/Special Topics Courses: “Freud, Darwin Einstein” (team taught)
“Computer Simulation Methods in Physics”

Distance Learning: Two videotape courses.

Recent Presentations

1. “Promoting Scientific Reasoning Skills Through an Interdisciplinary Gateway Course” (with K. Koenig and L. Locker). 2008 National Science Teachers Association Area Conference, Cincinnati, Ohio.
2. “How To use Assessment to Improve Student Learning” (with L. Locker). Sinclair Community College Summer 2008 Institute.
3. “Studying Oscillators through Numerical Experimentation”. Invited presentation for a group of science educators at Bowling Green University. Related to curriculum I developed for the Ralph Regula School of Computational Science (Ohio statewide initiative).
4. “Exploring Guided Inquiry” (with E. Gallo, P. Clark and P Fernandez). Presented to developmental mathematics faculty members at Sinclair Community College. Spring 2008.
5. “Scientific Thought and Method-Improving Student Scientific Reasoning Skills” (with K. Koenig). 2007 Summer Meeting of The American Association of Physics Teachers, Greensboro, North Carolina.
6. “The ABC’s of Assessment” (with L. Locker). Sinclair Community College Spring 2007 Institute.
7. "Educating the Educators: Partnering to Develop Math and Science Courses for Education Majors" at the 2006 national meeting of The National Association of Community College Teacher Education Programs (NACCTEP) in Atlanta, GA (with P. Greco, C. Gudorf and J. Parete).
8. "Engaging Students to Achieve a Deeper Level of Understanding" (with E. Gallo, P. Greco, and K. Cornealus). Sinclair Community College 2006 Fall Professional Day.
9. "Teaching the Teachers: How Content Courses for Teachers are Different " (with M. Aldridge, E. Gallo, P. Greco and K. Cornealus). Sinclair Community College 2005 Fall Professional Day.