# Dean Hamden March 2012

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## **EDUCATION**

Ph.D. Physics Education Walden University 1976

Minneapolis, MN

M.AT Physics Fairleigh Dickinson University 1965

Teaneck, NJ

B.S. Electrical Engineering Fairleigh Dickinson University 1964

Teaneck, NJ

## **PROFESSIONAL EXPERIENCE**

Assistant Professor September 1966 – Present Montclair State University
Department of Mathematical Sciences

## **TEACHING EXPERIENCE**

PHYS100: Concepts in Science Each semester 2000, 2002 PHYS193, 4 College Physics I and II Each year 2000, to 05

#### STUDENT RESEARCH

#### **Graduate students**

- Frances Rivera- Lopez, "Gender differences in understanding Physics problem terminology", 2003
- Edgar Manalo, "The effect of reorganizing the statement of Physics Problems on the ability of High school student's success in solving Physics Problems", 2003
- Doris Covington, "The Effect of Using Sports to promote learning Science in the an School", 2004

#### **Undergraduate students**

These research projects are ongoing

- Carolina Lopez, Gender differences in understanding Physics problem terminology", 2003
- Yanneris Rosario, "Gender and Ethnic Differences in Understanding Terms in Physics Problems and it's Effect on Problem Solving",2005

#### PROFESSIONAL PRESENTATIONS/ABSTRACTS

"Audio Visual Individualized Instruction as Used in Problem Solving in the General Physics Course" at the annual meeting of APS-AAPT, New York, January, 1976

Workshop leader "Piaget Developmental Stages in the Teaching of Physics, AAPT summer meeting, Rolla, Mo., July, 1976

"Problem Solving Difficulties in the General Physics Course," annual summer meeting AAPT, Rolla, Mo., July, 1976

## PROFESSIONAL SERVICE

#### **UNIVERSITY-BASED**

#### **University service**

Departmental representative on Graduate Council, 1968-72

Advisor, Intercultural Student Organization, 1970-78

Advisor, Tau Lambda Beta Fraternity, 1970-73

Faculty representative on Student Center Policy Board, 1974-75

Treasurer, MSC Faculty Association-AFT 1(American Federation of Teachers), 1974-75

State Delegate of Union AFT, 1975-77

Departmental and School Representative of the Faculty Association and AFT, 1972-74

## **College service**

College PAC representative, 1973,1984

Co-chairman of "School Central Planning Committee" for School of Math/Science, 1971

Member of School; Senate, 1981

#### **Department service**

Deputy Chairman of department, 1968-73

Graduate Advisor, 1968-73

MAT advisor, 1999-

College and General Physics Equipment, Laboratory and Course Coordinator, 1969 -

Departmental PAC Chairman, 1968-73

Departmental PAC Chairman, 1975-77 Departmental Faculty Advisory Committee 1969-84 Math for Physical Science Committee, 1969-1970 Chairman, Selection Committee, 1971.74 Departmental PAC, 2004, 2008

# **Recent Activities**

- 1. Participant in the Chautauqua Conference on various topics, 1992, 1993, 1994
- 2. Talk on Problem Solving and Critical Thinking at Philadelphia University, Amman, Jordan, 1994
- 3. Elementary Science Advisor Watchung School, Montclair School System, 1993, 1994, 1995
- 4. Talk on Interactive Physics Problem Solving at Philadelphia University, Amman, Jordan, 1995
- 5. Participated in numerous critical thinking conferences at MSU.
- 6. PRISM Adapt a Professor mentor working with Science teachers at Bergenfield High School and Roy Brown Middle School, 2005-
- 7. Research activities conducted with undergraduate and Graduate MAT students in "Problem Solving in the l Physics course" titled "Gender and Ethnic Differences in the Understanding of Physics Terms and Their Effect on Problem Solving Skills", 2000 to present. This is an ongoing research project
- 8. "The Effect of Using Sports to Teach Science Concepts in the Urban School"
- 9. Research activities in "The Science of Baseball" with the Yogi Berra Museum and the Weston Scholar Program
- 10. Summer research in Variable Stars 2009
  - 11. Coordinated a series of workshops for STEM faculty and students together with the "Research Academy for University Learning" exploring "Teaching and Learning based in New Discoveries in Neuroscience" Spring 2011

## **PROFESSIONAL MEMBERSHIPS**

American Association of Physics Teachers, 1971 Member Board of Directors American Friends of Family Circle, A charitable 501 (c) 3 organization, 2004 - present