

Vita

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William Jerry Polson
Professor of Physics
Chair, Department of Physical Sciences
Southeastern Oklahoma State University
 1405 N. 4th Avenue, PMB 4123
 Durant, Oklahoma 74701-0609
 Office: Science Building – S210
 580.745.2248
 FAX: 580.745.7494
 jpolson@se.edu

EDUCATION

- 1964 B. S. Physics and Mathematics East Texas State University
- 1966 M.S. Theoretical Nuclear Physics Stephen F. Austin State University
 Thesis: *"Bound States of Nuclear Matter"*
- 1969 Ph.D. Theoretical Nuclear Physics Auburn University
 Dissertation: *"A Distorted Wave Born Approximation Knock-Out Analysis of the $Ft^{19}[\alpha, \text{triton}]Ne^{20}$ Reaction at 18.5 and 28.5 MeV"*

ACADEMIC AND RELATED NON-ACADEMIC EXPERIENCE

- 1964-66 Research and Laboratory Assistant, Stephen F. Austin State University
- 1966-69 National Aeronautics and Space Administration Trainee in Physics, Auburn University
- 1969-73 Assistant Professor of Physics, Southeastern Oklahoma State University
- 1970 Participant in The Institute of Optics at the University of Rochester
- 1974-79 Associate Professor of Physics, Southeastern Oklahoma State University
- 1980-Present Professor of Physics, Southeastern Oklahoma State University
- 1990-2010 Chairman, Department of Chemistry, Computer, and Physical Sciences
- 2011 Assistant Vice President for Academic Affairs and Support; Dean, School of Graduate and University Studies

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PROFESSIONAL INTERESTS

Astrophysics

Cosmology

Weird Quantum Effects

Breakthrough Propulsion Physics

Web-based Instruction

SELECTED COMMITTEES AND SPECIAL ASSIGNMENTS

1988-89	Chairman of the first Faculty Senate
1990-92	Chairman of Curriculum Committee
1994-96	Chairman of Curriculum Committee
1992-93	Member of NCA Steering Committee
1994-95	Chairman of the General Education Task Force charged with the responsibility of revising the general education program
1997-99	Chairman of Faculty Senate
1996-98	Member of NCA Steering Committee
1996-2003	Member of Budget Committee
1996-2003	Member of Committee on Committees
1997-2003	Member of General Education Committee
1990-Present	Member of Academic Council
1995-Present	Faculty Athletic Representative
1997-99	Member of Administrative Council
1998	Member of Investiture Steering Committee
1998-Present	Member of Planning and Resource Council

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- 1998-1999 Chair of Technology Goal Team
- 1999-2001 Chair of Enrollment Goal Team
- 2001-2002 Chair of Web-based Instruction Task Force
- 2001-Present 2+2 Articulation Program Coordinator
- 2001-2004 Program Coordinator, Bachelor of General Studies
- 2001-2004 Program Coordinator, Bachelor of Applied Arts and Sciences
- 2002-2003 Member NCA Sub-Committee
- 2004-2010 Member of Curriculum Committee
- 2004-2007 Member of Distance Learning Council
- 2004-2007 Director of Distance Learning
- 2005-2006 Member of Mascot Committee
- 2005-2006 Co-Chair of Academic Excellence Goal Team

AWARDS AND HONORS

Teacher of the Year at S.O.S.U. (1972)

Winner of a cash prize award for submitting the best idea for improving S.O.S.U. (1973)

Winner of the Spirit of Southeastern Award (2005)

Listed in American Men of Science

Listed in Who's Who in the South and Southwest

Listed in Outstanding Educators of America

PROFESSIONAL MEMBERSHIPS

Member, American Physical Society

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EFFECTIVE TEACHING

Worked with computer science and computer information systems faculty to redesigned degree programs in those areas. I have installed the 2+2 Articulation Guides for thirteen community colleges on the Southeastern web page, chaired a committee to implement a Bachelor of General Studies degree, and chaired a committee to implement a Bachelor of Applied Arts and Sciences degree. I have also been appointed coordinator of the 2+2 Articulation Program. I have also been Director of Distance Learning and chaired the Distance Learning Council. I have developed and taught an internet based physical science course with laboratory experiments.

Courses Taught

PHYS 3114-Astronomy
 PHYS 1114 & 1214-General Physics
 PHYS 2015 & 2115Engineering Physics
 PHYS 3014-Mechanics
 PHYS 4114-Electricity & Magnetism
 PHYS 4314-Thermodynamics
 PHYS 3214-Optics
 PHYS 3713-Modern Physics
 PHYS 4813-Quantum Mechanics
 PHYS 4070-Mathematical Methods for Physicists
 PSCI 1114-Physical Science
 PSCI 1114-Physical Science (Internet Course)
 BASIC Programming
 FORTRAN Programming
 Algorithms and Processes
 Book of Romans (Continuing Education)
 Book of Revelation (Continuing Education)

PUBLICATIONS

Abstract of presentation before Texas Academy of Sciences: "*A Computer Analysis of Rayleigh Scattering of Acoustic Waves From A Sphere*" (1965)

Thesis: "*Bound States of Nuclear Matter*", Stephen F. Austin State University (1966)

Abstract of presentation before Alabama Academy of Sciences: "*A DWBA Knock-Out Analysis of the $F1^{19}[\alpha, \text{triton}]Ne^{20}$ Reaction at 18.5 and 28.5 Mev*" (1969)

Dissertation: "*A DWBA Knock-Out Analysis of the $F1^{19}[\alpha, \text{triton}]Ne^{20}$ Reaction at 18.5 and 28.5 Mev*" (1969)

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Abstract of presentation before the Texas Astronomical League: "*Construction and Use of A Lenseless Schmidt Camera*" (1977)

"*A Polynomial Curve Fitter*", DAL-ACE Newsletter, Vol. 10, Issue 3 (March, 1989)

OTHER PROFESSIONAL ACTIVITIES

"*Hydrogen As A Potential Fuel Source*", Central Industrial Applications Center publication (1975)

"*Methanol As A Potential Fuel Source*", Central Industrial Applications Center publication (1976)

Author of a monthly astronomy column entitled "*SKYWATCH*" in an area newspaper (Jan 1987-1994)

"*Teaching Astrophysics and Cosmology*", Science Workshop for Durant Public School Science Teachers (1985)

"*Constellation Study Using A Portable Planetarium*", Science Workshop for Teachers (1988)

"*Astronomy and Constellation Study*", Science Workshop for Teachers (1989)

"*Electromagnetic Levitation in an External Magnetic Field*", Oklahoma Academy of Sciences (1992)

Filed for a patent entitled: "*A System for Rapidly Determining Real Estate Ownership*" (1983)

Filed for a patent entitled: "*A Device Utilizing Electromagnetic Levitation In An External Magnetic Field*" (1991)

Participant in the Oklahoma Aerospace Workshop at S.O.S.U., Cape Canaveral, Florida and Lackland Air Force Base, San Antonio, Texas (1972)

Participant in numerous Leadership Workshops at S.O.S.U.

Paid consultant for the Central Industrial Applications Center, Durant, OK

Paid consultant for the Office of Grants and Contracts, S.O.S.U. (1978-79)

Director of Project 25 by 2000 (1986-88)

Member of North Central Association of Colleges and Secondary Schools team in evaluating Madill High School (1989)

Program Review Consultant in Physics for the state of Arkansas (1996-97)

Director of Science and Mathematics Academy (1990-2000)

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GRANTS AND CONTRACTS

Co-author of an equipment grant in physics which was funded by the State of Oklahoma (1975)

Author of an astronomy equipment grant that was funded by the Southeastern Foundation (1976)

Director of Project 25 by 2000 when it was funded by the Noble Foundation (1986-87)-\$20,000

Co-author of the Science Improvement Project grant funded by the Oklahoma State Department of Transportation (1988-89)-\$25,000

Principle author of grants funded by the Oklahoma Regents for Higher Education entitled, *"Hands On" Critical Thinking Experiences: A Novel Approach to Science and Mathematics* (1990, 1991, 1992, 1993, 1994, and 1995)-\$271,971

Principle author of a grant funded by American Telephone & Telegraph for an advanced computer laboratory (1993)-\$125,000

Principle author of grants funded by the Oklahoma Regents for Higher Education entitled, *Energy Futures: A Look at the Different Type of Energy and How We Produce It* (1996 and 1997)-\$33,842

Principle author of a grant funded by the Oklahoma Regents for Higher Education entitled, *High Tech Adventures with Robots, Telecommunications, Computer Design and Manufacturing, Interfaces, and Meteorology* (1998, 1999, and 2000)-\$70,352

PROFESSIONAL AND COMMUNITY SERVICE

Delivered numerous commencement and baccalaureate addresses at area schools.

Visited many area schools and service organizations to give presentations on astrophysics, cosmology, and space science.

Preached at numerous churches in Oklahoma and Texas. Served as interim pastor, conducted revival services, and been involved with lay renewal weekends at churches in Oklahoma and Texas.

Deacon at the First Baptist Church of Durant. Chairman of the Board of Deacons, (1985, 1988, 1996-97, and 2000)

Chairman, Pastor Search Committee, First Baptist Church of Durant, (1995 and 1998-99)

Chairman, Personnel Committee, First Baptist Church of Durant, (2002-2003)

Member of Durant Community Facilities Authority, (2007-Present)

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Member of Durant City Council, (2010)

Member of Durant Utilities Authority, (2010)

Member of Durant Industrial Authority, (2010)

Member of Durant Airport Authority, (2010)