

## Sheldon W. Davis

### Contact

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### Education

Ph. D. Ohio University, December, 1976 [Mathematics]  
 Dissertation: "*A Study of Certain Classes of Isocompact Spaces and of the Relationships Among Them*"  
 Major Professor: Howard H. Wicke

M. S. Ohio University, June, 1973 [Mathematics]

B. S. Ohio University, June, 1973 [Cutler Program]  
 Cutler Fellow: Ellery P. Golos

### Employment History

Auburn University: Instructor, January, 1977 to June, 1978

Miami University: Assistant Professor, 1978-1981  
 Associate Professor, 1981-1986  
 Professor, 1986-2008  
 Professor Emeritus, 2008-present

July, Director of Graduate Studies in the Department of Mathematics and Statistics,  
 1987-December, 1990, and July, 1995-July, 1999  
 Acting Associate Dean of the Graduate School, January, 1991-August, 1992

University of Texas at Tyler: Professor, 2008 – present  
 Chair of Mathematics Department, 2008 – present.

### Scholarly Activities

Book

•Topology, McGraw-Hill, Boston, 2005

Refereed Journal Publications

- *Images of the Countable Ordinals*, Topology and Its Applications 221(2017), 610-623 (with R. Bennett and D. J. Lutzer) <sup>2</sup>H.
- *Spaces with a  $\sigma$ -weakly Hereditarily Closure Preserving Base*, Topology Proceedings 35(2010), 9-18 (with D. K. Burke)
- *Covering Properties of Symmetrizable Spaces*, Comptes rendus de l'Academie Bulgare des Sciences 62(2009), 923-928 (with Dimitrina Stavrova)
- *Strongly Almost Disjoint Sets and Weakly Uniform Bases*, Transactions of the American Mathematical Society 352(2000), 4971-4987 (with Z. Balogh, W. Just, S. Shelah, and P. Szeptycki)
- *S-point Finite Refinable Spaces*, International Journal of Mathematics and Mathematical Sciences 22(1999), 367-375 (with E. Grabner and G. Grabner)
- *New Classic Problems*, Topology Proceedings 15(1990), 201-220 (with Z. Balogh, A. Dow, G. Gruenhagen, P. J. Nyikos, M. E. Rudin, F. D. Tall, and S. Watson)
- *A ZFC Nonseparable Lindelof Symmetrizable Hausdorff Space*, Comptes rendus de l'Academie Bulgare des Sciences 42(1989), 11-12 (with Z. T. Balogh and D. K. Burke)
- *A Property Related to the Strict  $p$ -space Problem*, Topology Proceedings 12(1987), 59-74 (with K. P. Hart)
- *The  $w\Delta$ -space Problem*, Topology and Its Applications 30(1988), 175-181 (with K Alster and D. K. Burke)
- *The Strict  $p$ -space Problem*, Topology Proceedings 10(1985), 277-292
- *More on Cauchy Conditions*, Topology Proceedings 9(1984), 31-36
- *On a Theorem of Peregudov*, Topology Proceedings 8(1983), 237-240 (with D. K. Burke)
- *Subsets of  ${}^{\omega}\omega$  and Generalized Metric Spaces*, Pacific Journal of Mathematics 110(1984), 273-281 (with D. K. Burke)
- *Questions on Symmetrizable Spaces*, Questions and Answers in General Topology 1(1983), 113-118 (with D. K. Burke)
- *Cauchy Conditions on Symmetrics*, Proceedings of the American Mathematical Society 86(1982), 349-352
- *Compactifications of Symmetrizable Spaces*, Proceedings of the American Mathematical Society 81(1981), 647-651 (with D. K. Burke)
- *Separability in Nearly Compact Symmetrizable Spaces*, Topology Proceedings 5(1980), 59-69 (with D. K. Burke)

• *The Paracompactness of Preparacompact Spaces*, Topology Proceedings 4(1979), 345-360  
(with J. C. Smith)

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• *A Non-developable Čech-complete Space with a Point-countable Base*, Proceedings of the American Mathematical Society 78(1980), 139-142

• *A Cushioning-type Weak Covering Property*, Pacific Journal of Mathematics 80(1979), 359-370

• *Separability and Minimal Weak Base Topologies*, Proceedings of the American Mathematical Society 74(1979), 371-378 (with R. M. Stephenson, Jr.)

• *Spaces with Linearly Ordered Local Bases*, Topology Proceedings 3(1978), 37-51

•  $G_\delta$ -sets in Symmetrizable and Related Spaces, General Topology and Its Applications 9(1978), 253-261 (with G. Gruenhage and P. J. Nyikos)

• *On  $F_\sigma$ -spaces*, General Topology and Its Applications 9(1978), 131-138

• *Cardinal Functions for  $k$ -spaces*, Proceedings of the American Mathematical Society 68(1978), 355-358 (with J. R. Boone and G. Gruenhage)

• *On Certain Isocompact Spaces*, Topology Proceedings 1(1976), 33-45

• *Further Results on Weakly Uniform Bases*, Houston Journal of Mathematics 2(1976), 57-63 (with G. M. Reed and M. L. Wage)

#### Other Research Activities

• Chair of the Steering Committee for the Spring Topology and Dynamical Systems Conference, 2014-2017.

• Member of the Steering Committee for the Spring Topology and Dynamical Systems Conference, 2011-2017.

• Chair of the 45<sup>th</sup> Annual Spring Topology and Dynamical Systems Conference, 2011. (NSF funded)

• Chair of the Organizing Committee for the Set-theoretic Topology session at the Spring Topology and Dynamical Systems Conference, 2005.

• guest editor for Topology Proceedings, 2001.

• Three circulated, but unsubmitted, manuscripts:

*A Strong Separation Property*, 2008 (with D. K. Burke)

*Partial Results on Strict  $p$ -spaces*, 1979

*Paralindelof Pseudocompact Spaces*, 1980 (with D. K. Burke)

• Principal Investigator or Co-Principal Investigator on 5 proposals to the National Science Foundation. One funded (1992-93).

• Recipient of Miami University Faculty Research Committee Summer Research Grant, 1980.

• Invited Colloquium Talks at Auburn University, Ohio University, Cleveland State University, University of Dayton, Miami University, and Wittenberg University

• Thirty-nine talks at various professional meetings

• Reviewer for Mathematical Reviews and Zentralblatt für Mathematik

• Referee of fifty papers for various professional journals

## Teaching and Student Activities

- Taught 4 courses per year in the Department of Mathematics at University of Texas at Tyler, 2008 – present.
- Taught 5-6 courses per year in the Department of Mathematics and Statistics at Miami University, including 26 different course numbers, 1978 – 2008.
- Designed the first year honors calculus courses MTH 249.H and MTH 252.H
- College of Arts and Science Admission Open House Programs, 1999-2007
- Football Red Carpet Day, 1999
- Team Leader for the Math 151 Teaching Team, consisting of 3 to 6 young faculty and myself, Fall, 1999, 2000, 2001, 2002, 2006
- Directed one Master of Arts Thesis (Elizabeth Warwick Stratton, Inductively Defined Topologies, 1987)
- Worked Summer Orientation Advising for incoming undergraduates, 1996-2007
- Served as Academic Advisor to numerous undergraduate and graduate mathematics and statistics majors
- Served as Faculty Associate (a.k.a. "Dorm Daddy") for Emerson Hall, 1979-1980 and 1990-1991
- Advisor to Miami Circle K club, 1990-1997
- Advisor to Miami University Graduate Student Association, 1990-1992
- Speaker for Pi Mu Epsilon (mathematics honorary) seven times
- Speaker for Math 190, Freshman Seminar in Mathematics, 1995, 1996, 2000, 2001, 2002, 2004, 2005, 2006, 2007
- Worked calculus help sessions  $\geq 2$  nights per term, 1978-1990, 1992-2007
- Attended Tutoring Forum conducted by Office of Learning Assistance, 1987, 1988, 1989, 1993
- Conducted calculus help sessions in Morris Residence Hall at request of Senior Resident Assistant, 2003
- Academic advisor for class of 2004
- Academic advisor for all Master of Arts students in Math-Stat, 2004-2008

## Service Activities (prior to Chair of Mathematics Department at UT Tyler)

### Committees Chaired

- University:
- Executive Committee of University Senate, 2006-2007
  - University Appeals Board, 2003-2007
  - Student Petitions Committee of Graduate Council, 1990-1995 and 1999-2002
  - Natural and Applied Science Area Subcommittee of the Graduate Council, 1989-1990 and 2002-2003
  - Search Committee for Director of University Honors Program, 2001-2002
  - Ad Hoc Committee on Enrollment Management of the Graduate Council, 1989
  - Ohio Board of Regents On-Campus Review Committee for the Department of Mathematics and Statistics, 1985-86
  - Program Review Team for the Department of Geography, Fall, 1993
  - Program Review Team for the Department of Chemistry, Fall, 1994
  - Athletic Policy Committee, 2000-2002

- College: •College of Arts and Science Governance Committee, 1989-1990
- Department: •Mathematics Search Committee, 2002-2003  
 •Area Coordinator for Analysis, Logic, and Topology, 1999-2001  
 •Calculus Teaching Team, 1999-2002, 2006  
 •Student Grievance Committee (two cases), 1998-1999  
 •Graduate Committee, 1987-1990 and 1995-1999  
 •Governance Committee, 1986-1987, 1992-1993  
 •Awards Committee, 1985-1986  
 •Professors Committee, 1986-1987 and 1993-1994  
 •Professors and Associate Professors Committee, 1981-1982  
 •Tenure Committee, 1993-1995  
 •Honors and Independent Study Committee, 1980 – 1982  
 •Drafting Committee for Professors review of Stephen Wright, 2003  
 •Master's Thesis Committee-two times  
 •Master's Final Oral Committee-seventeen times

#### Committees Served

- State of Ohio: •Ohio Board of Regents Transfer and Articulation Committee, 2004-2006  
 •OBOR Math and Science TAG Subcommittee, 2004-2006  
 •OBOR High School to College Articulation Committee, 2004-2008
- University: •University Senate, 1990-1991 and 1996–2008  
 •Executive Committee of University Senate, 2005-2007  
 •Ad Hoc Committee on Honors College and Interdisciplinary Studies Program,
- 2006
- Hodge, •Ad Hoc Committee to plan inauguration of Miami University President David  
 2006  
 •Graduate Council, 1987-1990 and 1992–2004  
 •University Appeals Board, 1998-2008  
 •Committee on Undergraduate Research, 2003-2007  
 •Committee on Campus Planning, 2004-2005  
 •Committee on Exterior Art, 2004-2007  
 •Athletic Policy Committee, 1999-2002  
 •Faculty Mediation Committee, 2004-2005  
 •Academic Integrity Committee of the NCAA Accreditation Steering Committee,  
 1999-2001  
 •Committee on Undergraduate Courses and Curriculum of University Senate,  
 1996-1998  
 •University Assessment Council, 1992-1997  
 •Committee to Review the Dean of the Graduate School, 1997-1998  
 •Academic Program Review Committee, 1993-1995  
 •Writing Team for Goodlad proposal for Institute for Educational Renewal, 1994  
 •Faculty Research Committee, 1984-1988  
 •Natural and Applied Science Area Subcommittee of the Graduate Council, 1984-
- 1986
- Ad Hoc Committee on Promotion and Tenure Policy of the University Council,

1985-1986

- Program Review Team for the Department of Psychology, Fall, 1992

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College:

- Academic Planning Committee, 1996-1998
- Governance Committee, 1988-1990

Department:

- Governance Committee, 1983-1984, 1985-1990, 1992-1995, and 1997-2002
- Graduate Committee, 1979-1983, 1984-1990, and 1993-1999, 2002-2005
- Student Grievance Committee, 1998-1999
- Teaching Evaluation Committee, 1997-1998
- Peer Review of Teaching, 2001, 2002, 2006
- Program Review Self-study Committee, 1995-1996
- Undergraduate Committee, 1980-1986 and 1992-1993
- Honors and Independent Study Committee, 1978-1982
- Calculus Committee, 1978-1980
- Hiring Committee, 1981, 1983, 1986, 1987, 1990, 2003
- Awards Committee, 1985-1987
- Analysis Comprehensive Examination Committee, 1983-1989, and 1999-2002
- Topology Comprehensive Examination Committee, 1979-1991 and 1992-2008
- Master's Final Oral Committee-36 times
- Assessment Coordinator, 1992-1993
- Accreditation Self-Study Committee, 1993

## **Activities as Associate Dean of the Graduate School**

Primary Responsibilities: Academic Affairs and Student Affairs

- Act as Dean of the Graduate School and Research (in the absence of the Dean)
- Represent Miami University at the Ohio Board of Regents Advisory Council on Graduate Study (in the absence of the dean)
- Represent Miami University at the Midwestern Association of Graduate Schools (accompanying the Dean)
- Supervise the professional staff of the Graduate School
- Serve as Secretary to Graduate Council
- Set and prepare Agenda for Graduate Council
- Act as Chair of Graduate Council (in the absence of the Dean)
- Coordinate activities and reports of the three area subcommittees of Graduate Council
- Chair the following committees:
  - Student Petitions Committee
  - Committee on Assessment of Written English
  - Student Financial Aid Committee
  - Graduate Students' Achievement Fund Committee
  - Academic Integrity Committee
  - Miami University Selection Committee for Midwestern Association of Graduate Schools Distinguished Thesis Award
  - Miami University Selection Committee for Ohio Board of Regents' Graduate/Professional School Fellowship
- Represent the Graduate School on the following committees:
  - Advisory Committee on Continuing Education

- University Assessment Council
- Council of Academic Deans (in the absence of the Dean)
- Committee for the Assessment of the Quality of the Service Assignment of Graduate Award Holders

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- Review and approve Graduate Faculty Level B appointments
- Review and approve appointments of thesis and dissertation committees
- Review and approve minor curriculum changes
- Review and approve proposals for one-time graduate course offerings
- Review and approve final oral examination results
- Make arrangements for SPEAK test for international students
- Make arrangements for written English test for international students
- Present Graduate School Orientation Program for incoming students
- Present annual program on Graduate School selection and applications for the Career

Planning and Placement Office

- Revise and update Graduate Edition of The Miami Bulletin
- Write the annual Report of the Graduate School
- Handle all complaints and difficulties associated with academic affairs and student affairs

## **Honors and Awards**

- Provost's Excellence in Teaching Award, University of Texas at Tyler, 2016.
- Ohio University College of Arts and Science Alumni Significant Achievement Award, 1992
- Nominated for MU Alumni Association Effective Educator Award, 2000
- Nominated for Outstanding Teacher Award by the Miami University graduating class of 1987, by the class of 1994, and by the class of 1996
- Received "Crystal Apple Award" from Talawanda City School District, 2003
- "Who's Who Among America's Teachers," 1998, 2002, 2003 (nominated by calculus students)
- Panhellenic Association and Interfraternity Council "Outstanding Faculty Reception," 2001
- Phi Kappa Tau fraternity "Favorite Professors Tea," 2001 and 2003
- Alpha Xi Delta sorority "Favorite Professor Thank You," 2000
- Alpha Omicron Pi sorority Faculty of the Month, March, 1999
- Alpha Epsilon Phi sorority "Thank you for your dedication to the students of Miami University", 1995
- Phi Kappa Psi fraternity Favorite Professor Reception, 1995
- Favorite Professor Lunch for graduating CAS students, 1992 and 1998

## **Professional Memberships**

- Texas Association of Academic Administrators in the Mathematical Sciences
  - President 2013-2014.
- American Mathematical Society
- Mathematical Association of America
  - Miami University Campus Representative to Ohio Section of MAA, 1988-1990, 1992-1994.