TIMOTHY A. FOSNAUGH

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EDUCATION

AUGUST 1993

DOCTOR OF PHILOSOPHY IN MATHEMATICS, UNIVERSITY OF NEBRASKA-LINCOLN

DECEMBER 1984

MASTER OF SCIENCE IN APPLIED MATHEMATICS, UNIVERSITY OF NEBRASKA-LINCOLN

DECEMBER 1981

BACHELOR OF MATHEMATICS AND SECONDARY EDUCATION,

UNIVERSITY OF NEBRASKA-LINCOLN

EXPERIENCE

2022-CURRENT LECTURER MIDWESTERN STATE UNIVERSITY, WICHITA FALLS, TX

1998 – 2001

FULL PROFESSOR OF MATHEMATICS AND BUSINESS ADMINISTRATION, WAYLAND BAPTIST UNIVERSITY

1996 – 1998 INSTRUCTOR OF MATHEMATICS AND COMPUTER SCIENCE, VERNON REGIONAL JUNIOR COLLEGE, VERNON, TX

1994 – 1996 INSTRUCTOR OF MATHEMATICS, MIDWESTERN STATE UNIVERSITY, WICHITA FALLS, TX

1991 – 1994 ASSISTANT PROFESSOR OF MATHEMATICS, EMPORIA STATE UNIVERSITY, EMPORIA, KS

TEACHING EXPERIENCE

COURSES TAUGHT AT VARIOUS UNIVERSITIES

DEVELOPMENTAL MATHEMATICS

- Beginning Algebra
- Intermediate Algebra
- Contemporary Mathematics (with co-requisite)
- College Algebra (with co-requisite)
- Math Lab Instructor/Specialist (Online software instruction for all levels of developmental mathematics)

OTHER MATHEMATICS

- College Algebra
- Trigonometry
- Calculus I, II, and III
- Discrete Mathematics
- Mathematical Analysis I and II
- Contemporary Mathematics (Liberal Arts)
- Business Mathematics (Algebra for Business Majors)
- Elementary Statistics

BUSINESS

- Computer Applications
- Advanced Computer Applications
- Spreadsheet Design and Implementation

- Algebra Concepts for Teachers
- Spatial Concepts for Teachers
- Differential Equations
- Linear Algebra
- Linear Programming
- Math Modeling (after Calculus II)
- Business Calculus

EDUCATION

• Educational Statistics

TEACHING, STUDENT RELATIONS AND ADVISEMENT

I have had the great privilege to be involved with education since I became a teaching assistant in 1981. My recent experience has been greatly enhanced by my association with Sheppard Air Force Base and the working professionals of the Wichita Falls area. I attempt to take time to learn something about each student's career field/major. Most of this is my love of learning and interest in the students, but it also helps me to relate the subject material to a wider audience and in particular how the content might enhance their careers and personal interests. Students are welcome and encouraged to ask any math/computer software question, usually outside of class, even after they graduate. This has led to many interesting problems that I have been able to share with my classes and in some cases turn into homework or a class project. It is always a joy to hear from someone years after they earned their degree. I am very willing to assist students outside of normal hours. My best example was in the time following 9/11. Due to military obligations, roughly 20 of my students could no longer attend their scheduled class time or could only come during one or two hours. Some were able to attend a different section. For the others we were able to set up two additional time slots that accommodated the need for contact time. I am pleased to say that all of these students earned a passing grade.

To date, I believe that I have been highly successful in my teaching performance. I am comfortable teaching to all levels of students. I am adept at identifying their current level of understanding and the skills they need to acquire to become successful in the class. One of my points of emphasis is for the student to become aware of their individual learning style. Each person has a talent. I ask how they became good at something. What do they need to write down so that the idea that makes sense now will still make sense later? How will you remember this? Many students say that I am highly recommended by former students. Numerous students have said they would not have passed without my assistance.

SERVICE

UNIVERSITY

I have assisted in 43 Graduation ceremonies. Duties have included Set Up, Marshalling, Reading the names of the Graduates, Hooding, Invocation and Benediction.

I have served on a handful of university committees. Most notable were the Doctorate in Management committee and the 2010 committee regarding the revision of the General Education requirements. I currently serve on the Diversity Awareness and Education Committee.

My service also includes helping to maintain the computers.

COMMUNITY, RELIGIOUS

I have been honored to serve a 3-year term as an Elder, 4 years on the Deaconate including a 1-year term as the Vice Chairman, 12 years on the Education committee including 2 years as the Chair, 2 years on the Vacation Bible School committee, and 2 years as an adult Sunday School teacher. I have also assisted on various fundraising projects. It was also my privilege to deliver a sermon on Laity Sunday.

COMMUNITY, OTHER

- 20 years' experience as an ASA/USA softball umpire
- 3 years as a soccer linesman
- 7-year member of the Band and Orchestra Parent Association for Rider High
- Fostered numerous dogs for three different rescue operations
- Assisted in coaching numerous softball and soccer teams
- Assisted in fundraising and service projects for music, cheerleading, soccer and softball

PROFESSIONAL SERVICE AND ACTIVITES

I have served as a mathematical consultant/reader on three professional publications in refereed journals, two doctoral dissertations, three masters theses and numerous student research projects. I served as a judge in the Red River Science Fair for over a decade. I also judged a speech and debate contest.

I have collaborated/consulted as a mathematician, experienced Excel and Word user on over a dozen projects involving Sheppard AFB and local businesses. These included tools for tracking/ assessing employees, instructors, students and inventory. Users include the United Regional Hospital, the base Pharmacy, several Air Force squadrons, the Wichita Falls Police Department, and Budget Rent a Car. One Word based project was awarded a Military Personnel Flight award. The Budget project was promptly advanced all the way to corporate headquarters where the student had a job waiting for him after graduation.

My wife, Dr. Linda Fosnaugh, and I have presented numerous "math enrichment" activities for local schools. Examples include Tiling the plane, Game Strategies and Walking through a piece of Paper.

CONFERENCES ATTENDED/TALKS GIVEN

NATIONAL

- 1990 Joint Meeting of the AMS in Louisville: presented a talk on "VECTOR MAXIMIZATION OF GENERALIZED CONCAVE FUNCTIONS: CONNECTEDNESS OF THE PARETO-OPTIMAL SETS."
- 1991 Joint Meeting of the AMS in San Francisco: presented a talk on "OPTIMIZATION OVER THE SET OF PARETO-OPTIMAL SOLUTIONS."
- 1993 Joint Meeting of the AMS in San Antonio
- 1994 Joint Meeting of the AMS in Cincinnati

SECTIONAL

- 1991 Nebraska and South Dakota: presented a talk on "CONNECTEDNESS OF THE EFFICIENT SET."
- 1993 Kansas
- 1994 Kansas: presented a talk on classroom teaching: "THE MAXIMUM HORIZONTAL DISTANCE OF A PROJECTILE."
- 1995, 1999 Texas

OTHER TALKS AND CONFERENCES

- 1992 University of Tennessee at Chattanooga: I was an *invited speaker* at a conference on Optimization over the Efficient Set.
- 1992 Oklahoma State University: Attended a conference on using computer technology in the classroom.
- 1997 Vernon Regional Junior College: Attended a workshop on distance learning. I presented a session on "**Tessellations**."
- I gave two departmental seminars while in Nebraska. the first was on "DEGENERACY IN MULTILPE CRITERIA DECISION MAKING", and the second was on "CONNECTEDNESS OF THE EFFICIENT SET."
- I gave two departmental seminars while at Kansas. the first was on "CONNECTEDNESS OF THE EFFICIENT SET", and the second was on "OPTIMIZATION OVER THE SET OF PARETO-OPTIMAL SOLUTIONS."

PUBLICATIONS IN REFEREED JOURNALS

- **OPTIMIZATION OVER THE EFFICIENT SET,** JOURNAL OF GLOBAL OPTIMIZATION, 1995, VOLUME 7, NUMBER 3, PAGE 261, JERALD P. DAUER, TIMOTHY A. FOSNAUGH
 - This later appeared in the book
 - MULTIPLE CRITERIA DECISION ANALYSIS, MARGARET M. WIECEK, MATTHIAS EHRGOTT AND ALEXANDER ENGAU, SERIES: INTERNATIONAL SERIES IN OPERATIONS RESEARCH & MANAGEMENT SCIENCE, YEAR: 2016, VOLUME 233, PAGE 739, DOI: <u>10.1007/978-1-4939-3094-4_18</u>
 - The article has been cited over 40 times and has a 96th percentile rating for its Citation Rank <u>https://citations.springer.com/item?doi=10.1007/BF01279451&books=Multiple+</u> Criteria+Decision+Analysis
- FOSNAUGH, L., HARRELL, M., & FOSNAUGH, T. (1997). WHEN KNOTTINESS IS FITTING BEHAVIOR. *THE MATHEMATICS TEACHER, 90*(1), 23-24. RETRIEVED FROM HTTP://WWW.JSTOR.ORG/STABLE/27970049