

HUGUETTE TRAN
3804 LA MANCHA LN., DENTON, TX 76205
(940) 484 -8091

EDUCATION:

Ph.D., 1991

Major: Mathematics

Degree Specialization: Numerical Analysis

Tulane University, New Orleans, Louisiana

Ph.D., 2016

Major: Marketing and Logistics

Degree Specialization: Math and Statistics

University of North Texas, Denton, Texas

TEACHING EXPERIENCE:

August 2016– Present

UNT Math Department (Denton, TX) Senior Lecturer

Teaching:

Taught math and statistics classes including Business Calculus, Calculus I, Calculus II, Multivariable Calculus, Linear Algebra, Differential Equations, Applied Statistics, Vector Calculus, and Financial Math.

New Courses Designed:

- Proposed Honors Linear Algebra to be taken both by TAMS students and by Honors College students to be implemented in Fall 2021. Proposal was approved by the current UAC in May 2020.
- Designed Asynchronous Linear Algebra - implemented in Fall 2020. Collaborated with Dr. Helen Elmwood
- Designed Asynchronous Honors-Combined Linear Algebra - to be implemented in Fall 2020 in case the class goes online. Collaborated with Dr. Helen Elmwood
- Designed Math 3860 – a revision of Math 4600 - to reflect the changes in curriculum of the FM Exam offered by the Society of Actuaries (SOA)

Curriculum Modifications:

- Modified requirements of the Actuarial Science Certificate (ASC): Math 3860 is required and FINA 4210 is optional. The ASC curriculum modification will allow students to acquire financial math knowledge, necessary for their employment, without the burden of an extra course. Consulted with Dr. J. Quintanilla. Approved by COS Curriculum Committee in May 2020.
- Modified requirements of the Actuarial Science Certificate: Students are now allowed to take either RMIN (Risk Management and Insurance) 3100 or RMIN 2500 as pre-requisites for the RMIN track. The ASC curriculum change assisted the RMIN department of the College of Business to continue offering RMIN 2500 without renumbering or discontinuing the course. Consulted with Drs. J.

Quintanilla, J. Liu, and M. Dulock. University Undergraduate Curriculum Committee was notified of the decision in July 2020.

Service:

College and University

- First Flight College Day Mock-Lecturer (2016, 2017, 2018, 2020): Conducted mock lectures to welcome incoming freshmen
- Future Eagles Program Mini-Mock Lecturer (2018): Conducted mock lectures to visiting middle-schoolers as part of the Future Eagles program
- Member of the Faculty Senate Budget Committee
- CAS Ambassador

Director of the Actuarial Certificate program

- Without being compensated, taught MATH 3022 (SOA EXAM 2/FM SEMINAR) for students wishing to prepare for the SOA (Society of Actuaries) Financial Math exam in Fall 2017
- Without being compensated, taught MATH 3021 (SOA EXAM 1/P SEMINAR) for students wishing to prepare for the SOA (Society of Actuaries) Probability exam in Fall 2017
- Partnered with FIREL faculties to distribute information on job fairs, scholarships, and internships for actuarial students.
- Served as a liason between Gamma Iota Sigma and actuarial science students to inform students of industry's opportunities and social events.
- Reviewed transcripts of prospective or incoming students to help them selecting the courses of study.
- Wrote letters to FIREL department on students' behalf to help students obtain waiver of accounting courses when students enroll in FINA 3770.
- Distributed information on job fairs, scholarships, and internships to actuarial science students.
- Contacted actuarial firms in the Dallas Fort-worth area to gain internships or employment for the actuarial students
- Taught Probability Exam Review for a former UNT math student wishing to change career and prepare for the SoA exam.
- Reviewed resumes and cover letters of students seeking internships
- Advised incoming and prospective students
- Designed MATH 3021, Seminar for SOA Exam 1/Probability
- Designed MATH 3022, Seminar for SOA Exam 2/Financial Mathematics

Career Exploration Events

- Served as a panelist on "Non-Academic Jobs for Graduate Students" organized by N. Krawzik in October 2019
- Organized the Actuarial Science Career event that included actuaries from the DFW area in March 2020. Event was not fulfilled due to the pandemic. Coordinated with N. Krawzik to organize the event.
- Hosted Actuarial Career Events with AON Consulting Group. Speakers were former UNT students
- Hosted Actuarial Event with Tower Willis. Speaker was the CEO of Tower Willis in Dallas

Lecturers Evaluation Committee

- Examined submissions of lectures to participate in the discussions of the annual reviews
- Wrote annual review letters on behalf of department
- Assisted with the updating of workload document and evaluation chart

- Assisted with the nomination of Ms. Krista Hines for the Outstanding Lecturer Award nomination

Undergraduate Affairs Committee:

- Examined, discussed, and voted on course proposals by faculty.
- Reviewed applications and selected recipients for departmental scholarships and for the COS “Aspiring Actuary” scholarship
- Reviewed records and selected outstanding students to be honored on Honors Day

Classroom Observer:

- Observed and wrote reports evaluating the classroom performance of about 5 instructors per year

Outreach Committee Member:

- Assisted with the publishing of newsletters
- Assisted with the organization of the department Celebration of Faculty and Student Achievements event
- Assisted with administering the AMC 8 exam, a mathematics competition for middle school students organized by the MAA. UNT is one among several testing sites in the area for local students.

Reference Writer for Graduate Students

- Wrote letters of recommendation for doctoral students during their employment search, including submission of reference letters to MathJobs.org or to individual systems or departments.

Reference Writer for Undergraduate Students

- Wrote letters of recommendation for students seeking scholarships, internships, REUs, graduate school acceptance, employment.
Results obtained by students included but not limited to:
 - * Research Experiences for Undergraduates (REU) Awards by National Science Foundation at Oklahoma State University and at Vrije University of Amsterdam
 - * Internships awarded by NASA, AON, and the Berkley Group
 - * Admission of students to graduate schools including Vrije University of Amsterdam, UT Arlington, UT Dallas, UT Houston, and UNT
 - * Offers of employment by AON, UNT, and by other actuarial or insurance companies
 - * Study Abroad to Bilbao, Spain scholarship offered by Emerald Eagle Scholars Global Exploration Pin

Reference Writer for Students of the Texas Academy of Math and Sciences (TAMS):

- Wrote letters of recommendation for TAMS students during their college applications. This is a substantial task each year. I reviewed the students’ resume, accepted their lists of prospective colleges, wrote assessments on Common App, and individual recommendations to universities. As needed, I advised the students on how to improve their resumes. Besides being offered admissions, many also obtained full scholarships. For examples, in recent years, students obtained full scholarships to UPenn, Yale University, and Duke University.

Awards and Honors:

- UNT 2018 Honors Day
Named by Emma Bronnenberg, a TAMS student, as a source of support and inspiration
- UNT 2018 Honors Day
Named by August Sangalli, an undergraduate Math student, as a source of support and inspiration
- UNT 2018 Honors Day

- Named by Alice Hou, a TAMS student, as a source of support and inspiration
- May 2017 UNT Math Department Service Award
Faculty Excellent Service Award
- UNT 2017 Honors Day
Named by Spencer Taylor, an Engineering student, as a source of support and inspiration
- Nominated by department for UNT J. H. Shelton Excellence in Teaching Award 2017 (did not win)

Scholarly, Creative, And Professional Activities

- Kochan, C., Pourreza, S., Tran, H., V. R. Prybutok. (2016). Determinants and logistics of e-waste recycling. The International Journal of Logistics Management, The International Journal of Logistics Management
- Tran, H., Pavur, R. J. (2019). An Alternative to Shannon's Entropy in Data Fusion and Clustering. Southwest Decision Sciences Institute. [http://www.swdsi.org/Conference Proceeding](http://www.swdsi.org/Conference_Proceeding)
- Tran, H., Pavur, R. J. (2016). Entropy-Based Estimation Applications for Business. Southwest Decision Sciences Institute's annual meeting.
- Tran, H. T. (Author & Presenter), Pavur, R. J. (Author), SWDSI Annual Meeting 2019, "An Alternative To Shannon's Entropy In Data Fusion And Clustering," Paper, SWDSI, Houston, United States of America. 2019.
- Pavur, R. J. (Author & Presenter), Tran, H. (Author), INFORMS, "Perspectives on Entropy-based Weightings for Integrating Information," Paper, Houston, TX, United States of America. 2017.
- Pavur, R. J. (Author), Tran, H. (Author & Presenter), Decision Sciences, "Entropy - Based Estimation Applications for Business," Paper, Oklahoma City, OK, United States of America. 2016.

August 2012– August 2016

UNT Math Department (Denton, TX) Continuing Lecturer

Teaching:

Taught math and statistics classes including Business Calculus, Calculus I, Calculus II, Multivariable Calculus, Linear Algebra, Differential Equations, Applied Statistics, Vector Calculus, and Financial Math.

New Courses Designed:

- Designed MATH 3021, Seminar for SOA Exam 1/Probability
- Designed MATH 3022, Seminar for SOA Exam 2/Financial Mathematics
- Designed MATH 4600, Financial Mathematics
- Designed and taught Math 4980 (Financial Mathematics, experimental course)

Service:

Math Advising Group/ Director of the Actuarial Certificate program

- Successfully persuaded the SoA to list UNT as one of the first seven Texas universities offering an approved actuarial program
- Maintained UNT's listing of the Validation by Educational Experience (VEE) courses with the Society of Actuaries (SoA) by obtaining the current syllabi of the MATH, ECON and FINA VEE courses and submitting them to the SoA to prove that the courses meet the SoA objectives

- Assisted former actuarial students to obtain their VEE credits with the SoA
- Contacted actuarial firms in the Dallas-Fort Worth area to gain internships or employment for actuarial students
- Consulted with faculty in the Mathematics and Finance departments to design the Financial Math course to fill gaps in our coverage of the exam syllabus
- Offered weekly Exam 2 Review seminars for students wishing to prepare for the SOA (Society of Actuaries) Financial Math exam.
- Offered weekly Exam 1 Review seminars for students wishing to prepare for the SOA (Society of Actuaries) Probability exam.
- Reviewed resumes and cover letters of students seeking internships
- Advised incoming and prospective students

Career Exploration Events

- Invited speakers and served as a panelist on the “Women in Financial Mathematics” event organized by Dr. A. Shepler (2014)
- Invited speakers and hosted career events to inform math majors of lucrative careers in mathematics

Lecturers Evaluation Committee (2013):

- Examined submissions of lectures to participate in the discussions of annual reviews
- Wrote annual review letters on behalf of department

Undergraduate Affairs Committee:

- Examined, discussed, and voted on course proposals by faculty.
- Examined applications and selected recipients for departmental scholarships and COS “Aspiring Actuary” scholarship
- Examined records and selected outstanding students to be honored on Honors Day

Classroom Observer:

- Observed and wrote reports evaluating the classroom performance of about 5 instructors per year

Outreach Committee Member:

- Assisted with the publishing of newsletters
- Assisted with the organization of the department Celebration of Faculty and Student Achievements event
- Assisted with administering the AMC 8 exam, a mathematics competition for middle school students organized by the MAA. UNT is one among several testing sites in the area for local students.

Course Coordinator of the Calculus sequence:

- Wrote common review and common final exams
- Addressed student concerns
- Collected core assessment data
- Prepared a realigned core curriculum justification and assessment plan for Math 1710

Reference Writer for Graduate Students

- Wrote letters of recommendation for doctoral students during their employment searches, including submission of reference letters to MathJobs.org or to individual systems or departments.

Reference Writer for Undergraduate Students

- Wrote letters of recommendation for students seeking scholarships, internships, REUs, graduate schools, employment. Results obtained by some students included but were not limited to:
 - * Internships offered by actuarial and insurance firms.
 - * Employment offered by UNT, actuarial firms, and insurance firms.

Reference Writer for Students of the Texas Academy of Math and Sciences (TAMS):

- Wrote letters of recommendation for TAMS students for their college applications. I reviewed the students' resumes, accepted their lists of prospective colleges, wrote assessments on Common App, and individual recommendations to universities. If necessary, I advised the students on how to improve their resumes. Besides being offered admissions, many also obtained full scholarships.
- Wrote letters of recommendation for TAMS students for Goldwater Scholarships (two obtained Honorable Mentions), summer internships, and the Intel Talent Search (one become a semi-finalist)

TEACHING HONORS:

May 2016 UNT Math Department
Faculty Excellent Teaching Award

UNT 2016 Honors Day
Named by Nicolas Baczewski, a Physics student, as a source of support and inspiration

2015 Institute of International Education
Awarded GE Foundation STAR AWARD, nominated by TAMS student Sara Chen

2015 Intel Science Talent Search
Named Teacher of Merit by Intel Science Talent Search, nominated by several winners of the competition

UNT 2014 Honors Day
Named by Dominic Nguyen, a Math student, as a source of support and inspiration

MIT Admission Office 2014
Named by Stacy Ho, a TAMS student who went on to MIT, as an influential teacher in her development

1997 Who's Who Among America's Teachers
Nominated by former students and selected for inclusion in the 1997 printed edition

2000 Who's Who Among America's Teachers
Nominated by former students and selected for inclusion in the 2000 printed edition

August 2011– July 2012
UNT Math Department – Lecturer

Teaching:

Taught math and statistics classes including Calculus I, Calculus II, Multivariable Calculus, and Applied Statistics. Taught Calculus I and Calculus II for the students of the Texas Academy of Math and Sciences.

Service:

Served as a course coordinator of the Calculus sequence:

- Created course outlines and common syllabi
- Wrote common review and common final exams
- Addressed student concerns
- Collected core assessment data

Served on the Lecturer Evaluation committee

- Assessed lecturers' performance

Served on the Lecturer Hiring committee

- Reviewed candidates' portfolio
- Interviewed candidates and participated in the final selection

Assisted actuarial students

- Offered weekly Exam 2 Review seminars for students wishing to prepare for the SOA (Society of Actuaries) Financial Math exam.
- Offered weekly Exam 1 Review seminars for students wishing to prepare for the SOA (Society of Actuaries) Probability exam.
- Contacted actuarial firms on behalf of students to assist them with their job search
- Reviewed resumes and cover letters of students seeking internships

Served as a panelist on the "Ask a Professor" panel on the First Flight day.

August 2010– July 2011

UNT Math Department – Adjunct

Teaching:

Taught math and statistics classes including College Algebra, Calculus II, Multivariable Calculus, and Applied Statistics

Service:

Offered Weekly Seminars in Probability to students preparing for the first exam of the Society of Actuaries

August 2004– July 2010

Private Instructor

- Taught math and statistics classes to area high school and college students; topics ranged from Algebra to Calculus III
- Taught children with learning disabilities
- Conducted SAT, AP Calculus AB/BC, AP Statistics, AP Computer Science, and AP Physics review classes

September 1998 – September 1999

CHUBB COMPUTER SERVICES (Dallas, TX): Software Trainer

- Conduct software classes to train prospective employees of DFW telecommunication companies such as Sprint. Classes taught included SQL, Databases, Visual Basic, C++, and Java.

September 1996 – September 1998

TEXAS WOMAN'S UNIVERSITY (Denton, TX) : Visiting Assistant Professor

- Taught math and computer science classes including Calculus, Probability and Statistics, Differential Equations (independent study), and Object-Oriented Programming in C++.
- Organized and conducted actuarial review classes for interested Math majors
- Acted as liaison between employers and students who were interested in an actuarial career

August 1990-June 1992

WEST CHESTER UNIVERSITY (West Chester, Pennsylvania): Visiting Assistant Professor

- Taught math and computer science classes including Finite Math, Business Calculus, Intro to Computing, and Programming in C

August 1989-June 1990

LOYOLA UNIVERSITY (New Orleans, LA): Assistant Professor

- Taught math and computer science classes including Calculus, Discrete Math, Numerical Analysis, and Programming in FORTRAN

ACTUARIAL and SOFTWARE WORK EXPERIENCE:

June 2002 – August 2004

AON RE SERVICES (Dallas, TX) Actuarial/Data Mining Software Developer

- Redesigned catastrophe-simulating program
- Developed data mining software to discover significant patterns of rare events from large data sets, allowing reinsurance analysts and actuaries to examine data at various business dimensions and hierarchies
- Developed data-cleansing software and data-transforming software to resolve data inconsistencies and to integrate data from multiple data warehouses

January 2000 – June 2002

POPULI/ SPRINGBOW.COM (Dallas, TX): Senior Software Architect

- Conducted training classes including Java Certification and SQL to fellow software developers
- Lead and participated in developing web projects for clients such as Frito-Lay (Plano, TX), ISANI (Dallas, TX), and Carter Blood Care (Dallas, TX)
- Mentored Frito-Lay employees and taught them programming skills

September 1998 – January, 2000

Actuarial Software Consultant

- Developed actuarial software to summarize claim data, expedite claim calculations, and export results into spreadsheets and database tables. My software reduced data processing time from over a week to several hours. Clients were insurance companies including Millers Insurance Group (Fort Worth, Texas) and Union Standard Insurance (Irving, Texas)

July 1992 – August 1996

***PRUDENTIAL RE (Newark, NJ), ISO (Manhattan, NY), SCRUGGS CONSULTING
Argyle, TX): Actuarial Analyst***

- Conducted research to examine the effect of currency exchanges on reinsurance pricing
- Conducted pricing seminars to reinsurance underwriters
- Created software to simulate catastrophe events
- Managed clients' databases
- Led a three-person team to create actuarial financial reports for insurance companies

TECHNICAL SKILLS:

Internet Development, Database Design (Oracle and SQL Server), JAVA (JDBC, Servlets, EJB), JavaScript, JSP, SQL, PL/SQL, HTML, C#, C++, Access, and Excel

Software Certifications:

- Oracle Certified - SQL and Intro to Programming in PL/SQL
- Oracle Certified - Programming in PL/SQL (ORACLE)
- Microsoft Certified - Visual Basic 6 Desktop Solutions
- Sun Certified Java Programmer

ACTUARIAL EXAMS:

Completed exams 1, 2, 3F, 3L, 4, VE, VF, VS (completed 5 exams prior to 2000)