

Alberto Alvarado

SENIOR LECTURER OF MATHEMATICS

Summary

Currently a Lecturer of Mathematics at Texas A&M University. Students have been receptive towards my methods and I continue to search for new ways to effectively teach and serve the students and faculty of Texas A&M San Antonio.

Education

2009-2012	M.S. in Mathematics University of Texas at Austin Master's Report: "The Advancement of Mathematics Through Visualization".
2003-2007	Bachelor of Science in Mathematics University of Texas at Austin Minor in Business Administration University of Texas at Austin
2009-2012	Provisional Certifications Classroom Teacher Mathematics (8-12) Master Teacher Mathematics (8-12)
2018-2019	Programming Certification SAS 9.4 Programming Fundamentals Other Technical Skills R and RStudio

Work Experience

The following work experience is summarized as a High School and University Level Mathematics Educator with coaching experience in both Soccer and Football. Albert Alvarado is considered a Master Mathematics Instructor by the State of Texas and holds the title of Senior Lecturer of Mathematics at Texas A&M San Antonio.

2016-Present	Texas A&M University San Antonio At Texas A&M San Antonio I am a Full Time Lecturer and have taught courses in College Algebra, Introductory Statistics, BioStatistics, Mathematics for Business and Social
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Sciences I & II, Fundamentals of Mathematics I&II, Biology and Medicine, Biology and Medicine Lab, College Algebra Corequisite and Lab, Introductory Statistics Corequisite and Lab, and Statistical Methods and Lab

2016-2019

University of The Incarnate Word

At the University of The Incarnate Word I have taught courses in College Algebra in which during my first semester students were able to experience a high success rate and according to surveys seemed to be very satisfied with the instruction they received. Coordinated a Summer Prep program where students were guided through Online Math Modules and in person support for students transitioning into UIW from High School. The goal of this program was for students to complete the modules, pass the Accuplacer exam, and start their college careers with College Algebra rather than remedial math.

2015-2017

Hallmark University

Taught courses in College Algebra (online, hybrid, and in class) Calculus Online, Business Statistics I Online, and Business Statistics Online II. Algebra and Calculus were taught with Webassign.net. Business Statistics was taught with the use Blackboard quizzes and online discussions amongst students on weekly topics during 8 week terms.

2015-2015

Sanford Brown College

Taught two College Algebra courses at Sanford Brown with a spectrum of students of all ages and all levels with great success.

2007-2016

Luther Burbank H.S. (2007-2016)

Working at Burbank along teachers that I had as a student has been a tremendous opportunity for me. With my experience in the school and familiarity with the community relating to students was very natural and rewarding for me. This experience in the community has transferred to TAMUSA as often times we get similar types of students that you would see in the inner city ISD schools.

Taught all high school mathematics core courses including Algebra I, Algebra II, Geometry, Pre-Calculus, Advanced Quantitative Reasoning, Advanced Placement Statistics, and Advanced Placement Calculus. My students ranged from 9th through 12th grade and were a variety of learners including Gifted and Talented, Advanced Placement, a variety of Special Education students, and International Baccalaureate. As a high school teacher I consistently outperformed my peers teaching similar courses on State exams and pass rates

2007-2010 2014-2016	Luther Burbank Football and Soccer Coach Was and Assistant Burbank Football Coach for 2 years which was during a time we took a team to the 2009 playoffs when they hadn't made it in the past 30 years. Was an Assistant Burbank Soccer Coach where we were able to train our Varsity athletes that eventually competed at the playoff level. I use my coaching experience to "coach" my students in performing at high levels of mathematics using the same rigor and intensity that I brought to the field of play.
2023	Sporti In April of 2023 I was offered a position to Coach my kids' teams at Sporti when the then head coach and former professional soccer player from the Ukraine decided to step down. I ran a program with 4 soccer teams and managed 50 players practicing 3 times a week with 4 games each week.
2023-2024	DMFC Currently coach up to 6 games per week with the DMFC Youth Soccer Club on multiple teams in both indoor and outdoor fields for ages ranging from 6 to 14 years old.
Teaching Experience	<hr/> Pedagogy Well versed in the 5E Lesson Model from the UTeach Program from the University of Texas at Austin. This program at one point was nationally replicated throughout the United States and has been mentioned by President George W. Bush and President Obama in their respective State of the Union addresses. Trained in various methods of teaching including Socratic methods of questioning, Bloom's Taxonomy, Project Based Instruction, Flipped Classroom, Inquiry Based Learning and Generative Design Lesson Plans pioneered by my University of Texas at Austin Professor Dr. Walter Stroup.
	Experienced Online Educator With the Covid 19 Pandemic I have taught courses through the use of Zoom and Blackboard Collaborate. I was taught through an online distance learning program at TAMU College Station for my Master's Program in Statistics which helped prepare me to teach courses online seamlessly. I also have ready to share video lessons for students that have extenuating circumstances that don't allow them to attend class so that they are able to stay current with the lessons in my class. I have open up additional office hour times by request with students who are unable to make my normal office hours through a link in my Blackboard page.

Learning Communities Courses

I continued to work in the Learning Communities courses in my College Algebra class. I have further developed modules from previous years that have students thinking about their grades and the importance of keeping them up from the beginning of the semester. Using algebraic models they are able to calculate the grades they need to attain a passing grade in courses under various formats. Additionally, students become more aware of how their GPA is calculated and the importance of their Freshman and Sophomore years.

Empowering Students Through TAMUSA's Programs

My mathematics courses are interconnected synergistically with the programs offered at TAMUSA including the use of TAs in my Corequisite Courses, tutoring through the Academic Learning Center, Brainfuse which offers 24/7 online support, and the use of mymathlab software that allows students to ask questions on their assignments through the "Ask My Instructor" button. In addition if students are having mental health issues I guide them to our counseling services office and the telus app/website. For students struggling in the classroom or with any other extenuating circumstances I utilize CARE requests to alert Division of Student Affairs at A&M-SA so that they can follow up with the student.

Contributions Through Overload

My students at the Texas A&M San Antonio University, University of the Incarnate Word, and Hallmark University have all seemed to be very appreciative of the instruction that I have provided. In Fall 2017 semester I taught 7 courses across the three Universities and the Spring 2023 semester I taught 8 courses. These challenging course loads have thoroughly prepared me for my current course loads. In Fall of 2024 I had approximately 19 hours of classes. At a time where it is difficult to hire Mathematics Instructors due to low pay this has provided a definite benefit to the department and the University.

Service

2023-Present

UTSA PREP Program At TAMUSA

In 2023 I was offered a position as the PREP Site Coordinator as an extension to UTSA's PREP program. Through intensive preparation and coordination of the program after navigating the vast bureaucracy of UTSA and TAMUSA to bring in a summer camp we achieved our goal and officially relaunched the PREP program at TAMUSA. I coordinated Year 1 PREP Course in Math and Logic with UTSA PREP team and my Instructor and Peer Assistant Mentor who ran the class wonderfully. Additionally, I coordinated the logistics of lunch and worked closely with Food Bank officials to ensure that students had an opportunity for a warm lunch every day. Additionally, I organized 7 speakers into our speaker series to give students a taste of various STEM careers and organized the closing ceremony that had full attendance by Year 1 families. Overall, parents seemed to be very satisfied with the program at Texas A&M San Antonio and according to UTSA PREP Director Dr. Araceli Ortiz the launch of PREP was a huge success!

In Summer 2024 2 more courses were added to the PREP program for a total of 45 students which is more than 100% growth from our first year. We had 2 year 1 classes and 1 Year 2 class which is significant since not all PREP sites have Year 2 courses. We look forward to our 3rd year with the program this Summer where we look to expand even further.

2023-2024

Extensive Work Through Hiring Committees

The hiring committee search committee was comprised of Qi Han, Jingbo Liu, Alberto Alvarado and Amy Main. This search committee was tasked with filling three separate positions in Mathematics, including two Lecturers and one Instructional Assistant Professor position. The committee met multiple times throughout the semester to discuss the search criteria, review required HR training, and develop both the scoring matrix and the interview questions for each search. Each member of the search committee reviewed almost 90 applications and accompanying materials for specific credentials and information. In each search, the committee conducted online interviews, then met to discuss and give feedback. In the case of the Instructional Assistant Professor position, the committee hosted on campus guests and made themselves available both for the campus visit and for the dinner the evening before. Additionally, the search committee attended both online and on campus teaching demonstrations as a second round interview for the Lecturer searches. The volume of work required for a single faculty search can be monumental; this committee conducted three searches in one semester, along with their normal teaching and service loads. The work of this committee was

professional, thoughtful, and thorough. Their active work during this time-consuming process was vital to identifying the best candidates for these critical faculty positions. Additionally, I was asked to do short turnaround hiring committee for a Physics Adjunct during the break in between Fall and Spring classes where we successfully hired a Physics Instructor.

2021-2022

EDCP Resources for Colleagues

Through the EDCP program I created ECourse Software for College Algebra which provides resources that included ready to use Blackboard Shell for new or existing instructors to use, complete note outlines, sample syllabus, and tentative schedule within the Blackboard Shell.

2022

MPES Peer Teaching Observation Committee

In 2022 I was asked to join the MPES Peer Teaching Observation Committee with Qi Han, and Bob Shelton. Within this committee we were tasked with preparing the procedures for Peer Teaching Observation. Over several meetings, feedback from peers, and many email exchanges we have created the Peer Observation Framework and Table & Rubric documents.

2021-Present

College Preparatory Course Partnership

Part of the College Preparatory Course Partnership between TAMUSA, UTSA, and Alamo Community Colleges and worked on a Memorandum of Understanding helping to make TAMUSA a new partner into College Preparatory Course Partnership. An ongoing task in this committee is to align this course to meet post-secondary mathematics standards

2022

Commencement Reader

Was one of the readers at the Spring commencement.

Mentoring and Advising

2021-Present

HPAC

In the HPAC (Health Professions Advisory Committee) I have taken on advisees in Occupational/Physical Therapy in addition. In the HPAC headed by Malin Lilley I have invited guest speakers including occupational therapists and a nurse to come speak at events hosted by HPAC. Additionally for the second year in a row I was part of a subcommittee within HPAC that selected a student for the Summer Undergraduate Research Program hosted by A&M's College of Medicine. Additionally, I have recruited several members into HPAC after discussing with students their future aspirations.

2021-2022	Faculty Advising Program I was an advisor in Faculty Advising Program where I mentored a group of students through a series of meetings where we ate and conversed on different topics including their experience at the University. I helped them to navigate the students' first year at the University.
2016-Present	Advisor For Students in My Class Many times students don't make it to advisors for whatever reason so through our conversations I try to offer students resources throughout the University and advising on what can best help them to achieve their goals in the my class, other classes, their major, scheduling, major, or career fields. If there are questions that I don't have the answer to I will provide connect them with someone who has the answer to their question.
2009-2012	Middle School Teacher Advisor As part of my Master Mathematics curriculum I became a mentor to middle school teachers where we engaged in an exchange of emails and online collaboration of best practices in the classroom. I also provided encouragement to fellow teachers to becoming Master Teachers.

Publications

As a Senior Lecturer of Mathematics I am not required Scholarship.	
2012	Alvarado, Alberto, Master's Report, "Advancement of Mathematics Through Visualization".
2023	Alberto Alvarado, Jingbo Liu, Oluwatobi Oguntuase*, Syrus Redhouse*, Matthew Trevino*, and Lilianna Villanueva*. (*Undergraduate coauthors) A probabilistic/statistical study on the parameter $\alpha\alpha$ in the LLL-algorithm regarding some intrinsic quantities of a lattice.

Presentations and invited lectures

2023-2024	Family Orientation Summer Presentation "How Do I Calculate My GPA and Can I Make An A"
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Professional training

2024-Present	Corequisite Fellows Texas A&M San Antonio The Corequisite Fellows Program is a Series of Faculty Professional Development aimed at improving the overall quality of teaching.
2024	ACUE Course
2018	Inquiry Based Learning Institute (IBL) in Austin
2008-2012	Laying the Foundation
2011	Advanced Quantitative Reasoning Professional Development
2009	AP Statistics Summer Institute at the University of Texas at Austin
2009-Present	Currently pursuing Masters in Mathematics at The University of Texas at Austin
2007	Student Teacher, Spring Semester Austin ISD at Akins H.S.
2010-2011	Participant in the Dynamic Geometry Project through the Texas State University, 2010 to 2011
2014	AP Calculus Summer Institute at the University of Texas at Austin, 2014
2012	ELL Training 2012
2013	GT Training 2013

Professional affiliations

2016-Present	National Council of Teachers in Mathematics
2016-Present	Association of Texas Professional Educators

Professional service

2023-2024	Assisted a Doctoral candidate with the data analysis on her thesis.
2014-Present	Provide Tutoring Services Through Straight A Tutoring services

Community service

2022-2024	Great Hearts Western Hills Advisory Committee Served as an advisory committee at Great Hearts Western Hills where we met throughout the school year advising on the overall operations of the school. 2020-Present
2022-Present	St. James Parish Pastoral Council Within this committee we meet with the Pastor of the parish to discuss ongoing issues within the church including ongoing construction, parish plans, fundraisers, and other pastoral issues. Additionally, I participate as a reader within the church.
2019-2023	St. James Catechists I teach Sunday school to students alongside with my wife every Sunday where we had the opportunity to teach 2nd graders including my daughter where she will be making her communion. As a math instructor I found it helpful to exercise teaching in different types of content matter.

Languages

English	Native language
Spanish	Fluently