

2024/2025 Sabbatical Leave Report

I am an Associate Professor, Rodrigo Saul Gaitan, who mostly teaches probability and statistics courses. My students often ask me to teach probability and statistics courses in the form of a MATH 495 (Special Studies) course. The most frequent MATH 495 request that I get is to teach a course in Actuarial Science, so I applied for a sabbatical to get more knowledgeable in Actuarial Science with the goal of introducing a new BS major in Actuarial Science for the Mathematics and Statistics department.

Upon completing my sabbatical, I have made significant progress in becoming a licensed actuary and am now knowledgeable with Actuarial Science. To become a licensed actuary in the United States of America, an actuary is required to be credentialed by either the Society of Actuaries (SOA) or by the Casualty Actuarial Society (CAS), and in my opinion, the SOA is the more popular of the two. The SOA offers three actuarial credentials: the Associate of the Society of Actuaries (ASA), the Chartered Enterprise Risk Analyst (CERA), and the Fellow of the Society of Actuaries (FSA). To better serve my students' inquiries about the actuarial profession, I decided to make progress towards the ASA credential. On 07/16/2019, I passed the SOA EXAM P (Probability), on 04/01/2022, I passed the SOA EXAM FM (Financial Mathematics), and on 07/06/2023, I completed (with a grade of "A+") an SOA-approved online course that is equivalent to a two-semester senior level course on Accounting and Corporate Finance. The purpose of completing the Accounting and Corporate Finance course was to satisfy the Validation by Educational Experience (VEE) component of the ASA credential. On 11/30/2022, I received VEE credit for previously completing an undergraduate course on micro-economics and an undergraduate course on macro-economics while at the University of California, San Diego (UCSD). On 12/06/2022, I received VEE credit for Applied Statistics for various statistics-related courses that I had completed while at UCSD.

While on Sabbatical, on 5/24/2025, I successfully passed the SOA EXAM SRM (Statistics for Risk Modeling), and I am next going to attempt the SOA EXAM FAM (Fundamentals of Actuarial Mathematics). The remaining unfinished SOA exams will be completed when I come back to SSU. Please note that I am constrained by the SOA exam schedule (<https://www.soa.org/education/exam-schedule/>), and I intend to complete one SOA exam per academic year while at SSU. For a complete description of the ASA exams and credential process, please go to <https://www.soa.org/education/exam-reg/edu-asa-reg>, and for the SOA exam pass rates, go to www.actuarial-lookup.com/pass-rates. As a result of my preparing myself for the SOA exams, I am now in a position to teach MATH 303 (Interest Theory), MATH 131 (Introduction to Finite Mathematics), and MATH 131A-B (Finite MATH for Business). Once I achieve the ASA

credential, I will initiate the process of creating a BS major in Actuarial Science for the Mathematics and Statistics department.

Rodrigo Saul Gaitan

Date: 5/31/2025