Department of Mathematical Sciences
Sabbatical Presentation

"Learning to Pose Beautiful Geometric Problems: A Personal Perspective"
Dr. Jose Contreras

Thursday, March 28, 2024
1:00-1:50 p.m.
RB 450

Abstract:

In this presentation, I will describe two of my problem-posing experiences on my trajectory to learn how to pose mathematical problems, in particular geometric problems. When appropriate, I use Dynamic Geometry Software (DGS) and mathematical reasoning as tools to verify the plausibility of each new posed problem. DGS allows us to move a figure to quickly generate data to test conjectures. Using a problem-posing framework that I have developed; I can generate a diversity of problems by modifying the attributes of a given problem. Among the problems that we can pose are special, general, extended, converse, and further extended problems. Examples of these types of problems, some of which I found to be aesthetically pleasing, will be discussed during the presentation.