



Spring 2017 Colloquium
Department of Computer and Information Sciences

*Sample Teaching Strategies for Mathematical Concepts in
Computing*

Gonzalo Bello Lander

Department of Computer Science
North Carolina State University

Monday, March 20, 11AM, SERC 306

Abstract: In this talk, I will present a sample lecture on injective (one-to-one), surjective (onto), and bijective (both one-to-one and onto) functions, a topic appropriate for the CIS 1166 course (Mathematical Concepts in Computing I) at Temple University. Throughout the lecture, I will employ different teaching strategies that illustrate the two guiding principles of my teaching philosophy: promoting active participation in the classroom (for example, by using a Jeopardy!-type game to review the definitions of injective, surjective, and bijective functions) and emphasizing the relevance of the material (for example, by discussing injective functions in the context of hash functions).

Bio: Gonzalo A. Bello is a Ph.D. candidate in the Department of Computer Science at North Carolina State University advised by Dr. Nagiza F. Samatova. He received an M.S. in Computer Science from North Carolina State University and a B.E. in Systems Engineering from Universidad Metropolitana in Caracas, Venezuela. His primary areas of interest are data mining and algorithms. His current research focuses on multi-objective algorithms for community detection in complex networks and their application in social network analysis and climate informatics.