Announcing
A Colloquium Presentation
March 7, 2012 at 3:30 pm
Southern Hall 303
at The University of Southern Mississippi

Speaker: Dr. Cecil Ekici
Evirx, LLC

Title: Phenomenology of Trigonometric Functions during the Reforms in School of Mathematics in the United States

Abstract:
Textbooks and reform documents provide a multiple source of descriptions of what it is to treat trigonometric functions as a school subject. There has been three reform periods in the United States – unified mathematics, new math, and standards-based instruction. Using phenomenology, I focused on ideas of trigonometric functions as a school subject manifested in textbooks and reform documents during reform periods. I used Schubring’s methodology of historical textbook analysis to develop a history of interpretations of trigonometric functions as a school subject. Triangle, circle, and vectors were described as major mathematical frames manifested in schools during reforms in introducing and developing trigonometric functions. They were used to explain the variations in textbooks’ treatments of trigonometry as a phenomenon during and across reforms. I described the appearances and changes in the treatments of the trigonometric functions along the course of three reform periods from selected textbooks and reform documents.

Further Information
Refreshments are served from 3:20 pm until 3:30 pm in Southern Hall 303.