

The main objective of the voice recognition online research experience was to devise a computer program that distinguishes between speakers. Our goal was to create an interdisciplinary project for Comp 467 and Math 480 that applied abstract scientific concepts to a "real life" problem, speaker recognition. The project met the student learning outcome for both majors: "be able to demonstrate the ability to apply mathematical skills to solve computing related problems." A voice recognition problem engaged students to apply the abstract mathematical concept of transforming data using Fourier transforms.

A total of 44 students from Comp 467 and Math 480 completed the project. Students worked in groups of at least one student from each course; there were a total of thirteen groups. The quantitative results of student learning showed eleven out of thirteen groups scored above 70% with a mean of 87%. An evaluation of their reflections showed it was a positive experience for the students. For example one student wrote: "It was very interesting working with people with a completely different background, ..... completely complemented each other in all strengths and weaknesses."  
two student projects