Bakersfield College Math Students
at the
Spring 2008 Mathematical Association of America Meeting

Six Bakersfield College students presented posters at the spring 2008 meeting of the Mathematical Association of America. This year’s meeting of the Southern California/Nevada Section was held on March 15 at the University of San Diego. The student poster session consisted of seventeen projects presented by students from UC’s, California State Universities, Two-year colleges, and private schools. Seven Meritorious Awards were given to projects, and Bakersfield College received four of them.

A Gallery of Artistic Mathematical Expressions
Eduardo (Lalo) Calles

Meritorious Award

This project is a display of original art inspired by the beauty of graphs from mathematics. The presentation shows a creative style of combining art with graphs in a unique type of expression.

Faculty Advisor: Rebecca Head
Ready, Set, Simulate!
Henry Gomez and Gerardo Gonzalez

Meritorious Award

How long do students actually wait for a registration spot in an impacted general education college course? We examined waitlist data from a statistics course to determine the event path of registration activities, modeled the probability distributions of queuing times using Minitab, and simulated the resulting waitlist system in ARENA.

Faculty Advisor: Liz Rozell
The objective of this project is to determine how much waste is produced by households per week taking into consideration annual household income and ethnic background. In order to do this I have been weighing the amount of trash produced by each household and dividing it into three categories: organic, recyclable, and other. With this data I will be able to determine how much of the waste can be reused so that space could be saved in the landfills. The importance of saving space in the landfills is not only financial, it is also very important for the environment. Knowing that Kern County has a huge problem with pollution, this is a good way to start making a change. I would like to use the results of this project to propose a program that will make the city of Bakersfield save money and the environment.

Advisor: Rebecca Head
Matters of the Heart: The Marriage of Mathematics and Medicine
Kelli Turner and Juan Saucedo

Many times one may enter the emergency room with the optimism of being attended quickly when chest pains arise, but in most cases one is left frustrated and bitter about the service. One method that could help both medical professionals and patients is the Preference Ranking Organization METHod for Enrichment Evaluation (PROMETHEE). The PROMETHEE evaluation matrix is composed of criteria such as age, gender, and pain history which can be utilized to rank each patient that comes in with chest pain according to the severity of the individual. The ranking is determined by preference functions and reasonable parameters for the criterion. In essence, this will help to eliminate unnecessary protocol treatment to a patient, and to apply effective measures to treating a patient.

Advisor: Rebecca Head
From top left: Pat Serpa, Henry Gomez, Kelli Turner, Juan Saucedo, Gerardo Gonzalez, Becky Head, Lalo Calles, Rick Brantley.
Bottom row: Kris Toler, Tom Greenwood, Donna Starr, David Herrera.