

High School Workshops

Spring 2002

During the Spring semester 2002, we held two high school workshops. The topic for the first workshop was probability and the second workshop was probability and game theory.

The first workshop was held at the U of A in Math 501 for students from Desert View High School, Sunny Side School District on March 22nd. The teacher contact was Helen Remington (Hjremington@aol.com). The students were part of a freshman honors group and spent the day at the U of A doing activities with the math and sciences departments. We held a probability workshop for them from 9:30 until 11am. The graduate students involved in this workshop were Sarah Frey, Julio Melendez-Morales, and Katrina Jiménez.

For the workshop, we utilized the Math 301/Math 302A Probability Lab. In this lab students play games using dice, coins, and colored tiles and try to determine if the games are fair or not. For a game to be “fair”, each player has an equal chance of winning. Then the students draw up charts and determine the actual probability each player has of winning. We did not use the entire original lab, but rather chose the games that we felt would be the most interesting. (Copies of the original lab and of our version of the lab are in a filing cabinet in Math 318.)

The second workshop we held this semester was on April 1st for students from Ha:san Preparatory and Leadership School, a high school for Native American students. The students arrived around 9:30am and stayed until 3:30pm. Since we knew that more than 40 students were coming, we decided ahead of time to break the students into two groups. While half of the students were learning probability, the other half were learning game theory, and then we switched the groups. The day went as follows:

From 9:30-10am, Sarah Frey did an introduction with the entire group.

From 10-noon, the students were split into two separate groups. Half learned about Probability and the other half learned about Game Theory.

The students had a lunch break from noon until 1:30.

The students switched groups and then went to the other session from 1:30-3:30pm.

The graduate students who helped with the Game Theory portion were Jessica Knapp, Adam Spiegler, and Jeanine Smallwood.

Those who helped with the probability portion were Lisa Berger, Sacha Swanson, Katrina Jiménez, and undergraduate Imelda Murrieta.

Once again, copies of the materials that we used for the workshop are located in Math 318.