

22nd Annual Natural Sciences Academic Festival
Mathematics Department
Capstone Presentations
Saturday, 7 May 2016, Morken 214

10:00 AM - 10:30 AM **Reeder Turnbull**

Using Regression Analysis to Model Driver Separation

This capstone will cover a use of applied statistics. Turnover in the trucking industry is close to one hundred percent, and with separation data I will use multiple regression to analyze and create a model to report drivers who are close to leaving the company.

10:30 AM - 11:00 AM **Guthrie Cook**

Fantasy Football: A Statistical Approach

Fantasy football has introduced an exciting opportunity for mathematicians who also happen to be sports fans. In this talk, we explore several statistical analytics that can be used to dominate a fantasy football league.

11:00 AM - 11:30 AM **Sheryl Stone**

Coding Theory

In this talk we will discuss how code words such as messages, transmitted over a noisy channel, have the tendency to transfer incorrectly. To avoid sending the wrong message we use error-detecting codes, error-correcting codes, and matrices to reduce our chances of errors in a message.

11:30 AM - 12:00 PM **Abby Tenhoff**

Google PageRank Algorithm

In this talk, we will explore how Google uses its PageRank algorithm to organize the importance of each webpage on the Internet based on individual searches. We will also discuss the algorithm's relationship to linear algebra.

12:00 PM - 12:30 PM *Complimentary Pizza Lunch*
Morken Center Atrium