

Student David Myer teams up with Dr. Roland Minton for Summer Scholar research
Mathematics of college football ranking systems
Lauren Thomas '07



Don't bet against mathematics major David Myer when it comes to college football rankings.

Myer's experience working on a Summer Scholar project with his advisor, Dr. Roland Minton, entitled "The Mathematics of Ranking Systems," allows him to integrate his passion for football with his innate understanding of mathematics.

"I'm definitely a sportsaholic and I first became interested in the mathematics behind ranking systems when Dr. Minton spoke about it," Myer says.

At the beginning of the Summer Scholar program, reading through various literature, researching information regarding the Bowl Championship Series (BCS) and studying the various data for the 2005 college football season was what consumed most of Myer's time. From there, Myer inserted data regarding the 119 college football teams from Division I into spreadsheets and ran statistical regressions on the data. Using Microsoft Excel and the math program Minitab, Myer would try to find a correlation between various statistics.

"I constantly compare my rankings with everyone else. It is a difficult task, and one can never be totally sure of what the outcomes will be. It is highly speculative considering one can never control the players, the draft or injuries throughout the season, but it is intriguing to see where my rankings fall in comparison to others," Myer says.

No ranking system is perfect and at times research can be quite complicated. However it is all part of attempting to understand the rankings.

Minton is not only Myer's advisor, but also was his mentor throughout the entire Summer Scholars project.

"Not only was Dr. Minton the person that piqued my interest with the mathematics behind ranking systems, but he has been such a huge help to me throughout all of my research. He keeps me on track, helps me figure out how to progress to the next step and is overall very influential. I love talking to him because not only is he a fellow sports nut, but he is an excellent mentor for my project," says Myer.

“With David, my main roles were in finding resources and providing feedback. Since this topic is an area of research that I’ve worked on for a couple of years, I could point David to some helpful books, articles and web sites. Math is a very individual discipline, and often one person’s way of understanding an idea is very different from how another person understands it. Conversation is very helpful for clearing up misunderstandings,” says Minton.

Minton’s love for his alma mater, Clemson University, as well as his great interest in football is evident in his own ranking system for football.

Minton recently was one of 12 professors from the state honored with the prestigious Outstanding Faculty Award by former Gov. Mark Warner. This is not the first time Minton has been honored for his outstanding teaching. The Roanoke College Dean’s Council presented Minton with the Exemplary Teaching Award in 1998 for his consistently interesting approach to teaching. He has co-authored many mathematics textbooks for McGraw-Hill and plans to publish three more in the next two years. His textbook “Calculus” is used in 100 U.S. colleges and universities and on every continent except Antarctica.