

Daniel Miller Receives 2010-11 Provost Teaching Assistant Award

April 15, 2011 - Dan Miller, a teaching assistant in the Department of Mechanical Engineering was one of the recipients of the 2010-11 USF Provost Teaching Assistant Awards. Dan Miller has been teaching EML3035 Programming Concepts for Mechanical Engineers since Spring 2010.

The selection process for these awards was rigorous. Each college could forward only a maximum of two nominations (College of Arts and Sciences were allowed to submit six nominations) to the university for the award.



The following were the criteria for the process:

- 1) philosophy of teaching;
- 2) teaching evaluation data with a careful review of student comments;
- 3) number of different classes/labs taught with separate preps and student audiences;
- 4) evidence of innovation and creativity in teaching;
- 5) publication and/or presentation of teaching techniques;
- 6) evidence of pursuing additional training in best practices related to teaching; and
- 7) overall success of the student in his/her academic program

Mr. Miller has brought his own personal style to the course by creating 10-minute block sessions, introducing new projects, and developing original test problems. Part of Dan Miller's philosophy of teaching is that the learning process requires a healthy dose of patience - both by the educator and the student, and that an educator must never give up on the student. Dan also believes that positive reinforcement yields a high student success rate, and that an educator should provide an enriching and comfortable environment while encouraging correct habits and methods.

Some of the Dan Miller's student evaluations state:

- "Dan is a fantastic teacher. He takes the time to make each class interesting and enjoyable. He is helpful inside and outside of class and always seems willing to go out of his way to make sure whoever needs help gets it. I really enjoyed this class and Dan specifically as a teacher."
- "Provides an enjoyable atmosphere for learning. Easy to get in contact with and very good teacher."

Dan Miller has co-authored a textbook *Introduction to Programming Concepts with MATLAB*, lulu.com, 2010, with Professor Autar Kaw. The textbook is used in the EML3035 course at University of South Florida, was adopted by Arizona State University in Spring 2011, and is slated for adoption by Old Dominion University in Fall 2011.

Dan Miller is graduating with a MSME degree in May 2011. His MS thesis is on developing body armors. He has designed patentable (a patent application has been filed with USF) body armors that are mobile as well as lightweight, while using analytical and numerical tools such as ANSYS, MATLAB, and SolidWorks. Dan designed the body armor systems specifically with military and police personnel in mind to protect against armor piercing rifle projectiles - a very difficult design task. The armor system uses currently available materials, while results indicate that it is about 30% lighter than currently available rifle-protective armor technology.

He is employed by Hatch Corporation and is a commissioned officer in the U.S. Navy Reserves.