May 21-22,2015

### ITEM 167-2003-R0515

# <u>Authorization to Confer the Title of Professor Emeritus of Mathematics upon Warren W. Esty; Montana</u> <u>State University</u>

## THAT

Upon the occasion of the retirement of Warren Esty from the faculty of Montana State University, the faculty wishes to express its deep appreciation for his dedicated and valued service to the University and the state of Montana by recommending that the rank of Professor Emeritus be conferred upon him by the Board of Regents of the Montana University System.

## **EXPLANATION**

Dr. Warren Esty earned his B.S. in Mathematics in 1966 at Oberlin College and both his M.A. (1967) and his Ph.D. in Mathematics (1973) at the University of Wisconsin, Madison. After a stint at Cleveland State University, he came to MSU in 1976 as an Assistant Professor of Mathematics. He was promoted to Professor of Mathematics in 1984 and has been on the faculty at MSU for 38 years.

Dr. Esty has been involved in the Mathematics program at Montana State University as a teacher, mentor, and researcher. He has been an extraordinary teacher and mentor at both the undergraduate and graduate levels. His passions are precise mathematical thinking and great teaching. Every mathematics major and every graduate student in the last 30 years has gone through the hands of Dr. Esty. Traditionally, the transition to higher level mathematics happens in the Advanced Calculus, where students for the first time are exposed to, and required to write, proofs; this is not only an essential part of being a mathematician, but provides a great educational opportunity for anyone to sharpen their reasoning skills. Dr. Esty has taught this class for decades and, in doing so, has become a legend. Advanced Calculus is a very time-consuming class to teach because to teach the reasoning one has to revert to Aristotelian methods: grade every argument, explain individually every mistake, and talk to each student one-on-one; Dr. Esty thrived in this environment and took on this task with enthusiasm and great skill. His interest in college-level mathematics education has been deep and sustained.

Dr. Esty also developed a unique class, Methods of Proof, which introduces sophomore students to the rules of mathematical reasoning and this class has been oversubscribed for years. In addition to his impact on undergraduate education, Dr. Esty supervised M 151 Precalculus multi-section class for many years. In doing so, he mentored generations of graduate teaching assistants in how to teach mathematics. Going through these classes was a rite of passage into the beauty and rigor of mathematics and how to teach mathematics.

Dr. Esty's research is as formidable as it is varied, he has published 51 peer reviewed articles and four books. There are few mathematicians whom have that substantial, yet diverse, a publication record; his articles vary from probability and statistics in earlier years to mathematics education and even numismatics in the second half of his career. His books have his students squarely in mind; they are all textbooks that were developed with MSU students in mind and in the classrooms.

Dr. Esty has been a leader in the Department of Mathematical Sciences for almost four decades; he has been the person faculty went to for help with their teaching, he is always there with solid and selfless advice on our undergraduate and graduate programs. If every Department had a few faculty like Dr. Esty, higher education would be a much better place. Dr. Esty leaves with a legacy that will be with us for a long time.

### **ATTACHMENTS**

None