#### CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

# COLLOQUIUM

Friday, October 3 2:00 – 3:00 PM Maria Sanford, Room 101

## ZOMBIE APOCALYPSE! (PLUS OTHER COOL STUFF LIKE LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS)

### **CRAIG MILLER**

#### WORCESTER STATE UNIVERSITY

<u>Abstract</u>: Mathematics has been used to model numerous real world systems and occurrences. These include weather prediction, the adoption of technology, and the spread of infectious diseases. In this talk I will show not only how we can use elementary Linear Algebra and Differential Equations to model infectious diseases but also a more pressing problem: the threat of a Zombie Apocalypse! We will not only see this application, but also investigate more advanced models including incubation periods, immunization, and quarantine efforts.

For further information: <u>gotchevi@ccsu.edu</u> 860-832-2839 http://www.math.ccsu.edu/gotchev/colloquium/