# Bi-State Math Colloquium 

Who: Clem Jeske
When: Thursday, Feb. 23, 4:00 pm
Where: Ottensman 124, UW-Platteville

## Packing of Planes and Boxes



Polyominoes are figures in the plane that can be obtained by joining congruent rectangles edge-to-edge. For 2, 3, 4 or 5 squares there are 1 domino, 2 trominoes, 5 tetrominoes and 12 pentominoes. In 1953, Solomon Golomb introduced the idea of packing rectangular regions of the plane with polyominoes. Since then, there have been many puzzles devised that require filling a region with polyominoes or filling a box with the 3 -dimensional version, which are called polycubes. Shown above is a popular puzzle that requires the packing of a $5 \times 12$ rectangle with the 12 pentominoes. This talk will focus on the use of colorings to devise solutions (or lack thereof) for some of these problems.

Clem Jeske is a professor of mathematics at UW-Platteville. Having arrived in Platteville in fall of 1984, he is currently tied for 10th most senior member of the faculty.

