1096-51-1246 **Kyle Evitts*** (kyle.evitts@linfield.edu), **Brian Whetter** and **Brian Keating**. *Tilings of Annular Regions.*

In this talk we discuss our results from the Willamette Valley REU program this summer where we investigated tiling questions in the integer lattice. The most basic question is, given a connected region R made up of unit cells and a set of polyomino tiles T, can one cover R using tiles from T so that each cell in R is covered once and only once? A lot is already known about tilings of simply connected regions, so we studied tilings of rectangular annular regions over the set of T and skew tetrominoes. We give a complete classification of which annular regions are tileable. However, the goal of this talk will be to present our enumeration of possible tilings for a subset of the regions we studied. (Received September 13, 2013)