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**Steven T Dougherty\*** (doughertys1@scranton.edu), University of Scranton, Scranton, PA 18510, and **Young Ho Park**. *On Modular Cyclic Codes*.

We study cyclic codes of arbitrary length over the ring of integers  $Z_m$ . We use a series of algebraic techniques to describe the structure of these codes as a direct sum of ideals in certain rings. We define higher torsion codes and use them to classify these ideals. (Received August 24, 2006)