Linhong Wang* (lwang@selu.edu), Department of Mathematics, SLU 10687, Hammond, LA 70402. Nonsplit module extensions over a non-noetherian ring. Preliminary report.

Let R be the associative algebra generated by two elements x and y with defining relation yx = 1. A complete description of simple modules over R is obtained by using the results of Irving and Gerritzen. We examine the short exact sequence of the form $0 \longrightarrow U \longrightarrow E \longrightarrow V \longrightarrow 0$, where U and V are simple R-modules, and give an explicit classification of nonsplit extensions of simple modules over R. (Received September 14, 2008)