Joshua Hallam* (hallamjw@wfu.edu). Some applications of quotient posets.

Given a poset and an equivalence relation on the poset, the quotient poset is obtained by ordering the equivalence classes in a way related to the ordering of the original poset. We will discuss how quotient posets can be used to study the Möbius function, the characteristic polynomial, the rank polynomial, and increasing forests of graphs. (Received August 02, 2015)