

1067-Z1-2108

**Hollie L Buchanan\*** ([hbuchanan@westliberty.edu](mailto:hbuchanan@westliberty.edu)), 195 Campus Service Center, Box 295,  
West Liberty University, West Liberty, WV 26074. *Graph Factors Including or Excluding Certain  
Edge Sets in Bipartite Graphs.*

A necessary and sufficient condition is obtained for a bipartite graph to have an  $f$ -factor which includes a designated set of edges and is disjoint from another designated set of edges. Various other characterizations are obtained for similar subgraph structures and a characterization is obtained for a bipartite graph admitting an  $f$ -factor which includes no one of a collection of designated sets. (Received September 22, 2010)