1096-J5-326   **Karin R Saoub*** (`saoub@roanoke.edu`), 221 College Lane, Roanoke College, MCSP Department, Salem, VA 24153. *A Tour through Graph Theory: Projects for a Liberal Arts Math Course.*

How should a delivery service plan their route? How should a mailman most efficiently deliver the mail? While these questions seem the same, graph theoretically they are very different. These and other classic graph theory problems have been adapted for my liberal arts math course. We emphasize the basic strategies for solving small-sized problems, the challenges of abstracting to larger scales, and the importance of these challenges. Projects have students using real world data to answer questions about their local environment, from the Roanoke College campus to the greater Virginia area. This talk will highlight the Chinese Postman Problem, Traveling Salesman Problem and Shortest Network Problem and the activities associated with them. (Received August 28, 2013)