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The purpose of this session is to describe a college algebra and computer science interdisciplinary seminar utilizing academic-service learning. This seminar developed for mathematics or computer science majors exposes students to a real-world problem: making the process of providing meals to the elderly more efficient.

Through a National Science Foundation Talent Expansion Program (STEP) grant (DUE-0525514), Eastern Michigan University is developing a series of interdisciplinary seminars consisting of mathematics and computer science courses that not only provide data acquisition, design of experiments, use of theory, and computer programming, but also serve a non-profit community agency in the process.

The algebra and computer science classes set out to design a method to help the manager of the Meals on Wheels organization quickly generate efficient routes for a volatile list. The routing system implemented is based on a Traveling Salesman Problem heuristic that is extremely simple and yet provides good tours on the average (Bartholdi and Platzman, 1982). The idea behind this algorithm is a Sierpinski spacefilling curve.

Students gain an appreciation for how they can apply college algebra and computer programming. (Received August 30, 2006)