

1077-C1-1121      **Daniel E. Otero** (otero@xavier.xu.edu), 3800 Victory Parkway, Cincinnati, OH 45207-4441,  
and **Joseph F. Wagner\***. *A formative three-semester capstone experience.*

In 2008, the mathematics major program at Xavier University underwent a substantial revision, including the institution of a capstone experience. This takes the form of a sequence of three one-credit seminars beginning in the spring of the third year and culminating in the production of a senior project at the end of the fourth year. The design places third- and fourth-year students together in the spring as the former begin considering their projects while the latter are completing theirs. Benefits of this design include a strengthening of the local learning community, a continuity of program quality and purpose, and a forum for fourth-years to practice presenting their results as the third-years discover what is expected of a quality project. The spring seminar also discusses issues of inculturation into the mathematical community (use of library resources, professional societies, technical writing, presentation skills, etc.). The second semester is reserved for students to meet regularly with a faculty advisor for support as they carry out their research. The completed project involves producing a substantial paper and a 30-minute formal oral presentation to the department. We will present lessons learned from administering the program and assessing student work. (Received September 16, 2011)