

1023-Z1-1171 **Melvin G. Royer*** (melvin.royer@indwes.edu), 4201 S Washington St, Marion, IN 46953.
Success Stories from a First Semester Seminar for Math Majors.

The presentation describes a freshman seminar course designed to increase the retention, success, and career potential of mathematics majors. Taught since 2003, the course arose from faculty observations that many new majors have difficulty assimilating mathematical culture, which leads to disenchantment with the major and/or eventual inability to find employment within the discipline.

The course is required of all incoming mathematics and mathematics education majors, but is open to anyone interested in an overview of the discipline. Topics address the following objectives and are presented via group activities and discussion whenever possible: (1) Introduce students to their peers, faculty, and the larger mathematical community; (2) Introduce the processes of conjecture, proof, and technical writing; (3) Demonstrate the capabilities and appropriate use of mathematical software; (4) Link motives for choosing the major with potential career choices; (5) Survey axiomatic systems, primarily via geometrical paradoxes and the nature of reality; (6) Guide professional development via discussions of course selection, internships/REU's, etc.

The talk surveys activities of the course with an emphasis on student feedback and instructor evaluation of "what worked, what didn't." (Received September 25, 2006)