1014-Z1-99   **Paul Kochanowski** and **Morteza Shafii-Mousavi*** (`mshafii@iusb.edu`), Department of Mathematical Sciences, Indiana University South Bend, P.O. Box 7111, South Bend, IN 46634. *Mathematical Preparation for First Statistics Courses.*

In this presentation, we will discuss how the IUSB linked courses, Mathematics in Action: Social and Industrial Problems, and Introduction to Computing satisfy statisticians' articulated goals for prerequisites: 1) emphasize multiple presentations of mathematical objects; 2) multiple approaches to problem solving; 3) adopt learning-centered instruction and address students' different learning styles by employing multiple pedagogies; 4) insist that students communicate in writing and learn to read algebra for meaning; 5) use real, engaging applications through which students can learn to draw connections between the language of math and the context of the application; 6) instill appreciation of the power of technology and develop skills necessary to use appropriate technology to solve problems, develop understanding, and explore concepts; and 7) align assessment strategies with instructional goals. We will present project examples, lesson plans, descriptions of course structures illustrating how students in these linked classes learn mathematics, data generation, technological tools and applications. Further, the presentation will include examples of student team work, writing, discussion, and connections between the language of mathematics and the context of the application. (Received July 23, 2005)