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William W. Johnston* (bwjohnst@butler.edu), Butler University, 4600 Sunset Ave., Indianapolis, IN 46208. *Introduction to Proofs as A Survey Course in Mathematics.*

This presentation describes the effects on students of teaching the Proofs course as a survey of seven different mathematical subfields and its resulting impact: an increased number of majors at two institutions where its design has become standard. The choice of subfields includes mathematical logic, which importantly begins the course's outline and thus promotes logic (1) as an interesting study in its own right but also (2) as a foundation on which mathematical proofs can be based. The design then flows through abstract algebra, number theory, real analysis, graph theory, probability, and complex analysis, incorporating overarching themes to provide segues from one subfield to the next. The impact is widespread. For example, the small "tastes" students get of any one topic sets up better success in the upper level curriculum. Students also report the course design helps them choose elective majors courses in a more informed manner. A strikingly large percentage of students taking this course design end up declaring mathematics as a major. (Received September 16, 2013)