

1086-C5-1276      **Heakyung Lee\*** (leeh@winthrop.edu), Winthrop University, Department of Mathematics, Rock Hill, SC 29732, and **Joseph P Rusinco** (rusincoj@winthrop.edu), Winthrop University, Department of Mathematics, Rock Hill, SC 29732. *Mathematical Reasoning course at Winthrop*. Preliminary report.

The mathematics department at Winthrop University in South Carolina offers an introductory proof course, Mathematical Reasoning. This course was created 2 years ago to develop students' proof writing and reasoning skills to help them prepare for their upper level mathematics courses. This course also serves to bridge the gap between computationally focused courses like calculus and more abstract courses like modern algebra. The course has several main components: weekly proof writing assignments from the textbook, a research article analysis, applied proof assignments by applying the proof techniques developed in class, and a portfolio assignment. The presentation will discuss each component listed above and provide information on what was a success, what was failed, and what needs to be improved in each component. A sample of common mistakes made by students on their proof assignments will be also shown. (Received September 21, 2012)