

1135-H5-670

Steven M Deckelman* (deckelmans@uwstout.edu), 305 Jarvis Hall Science Wing, 410 10th Avenue East, Menomonie, WI 54751. *Incorporating Philosophy, Theology and the History of Mathematics in an Introduction to Proof Course.*

Kurt Gödel (1906-1978) is well known for this celebrated incompleteness theorem. Perhaps less well known is that he also composed at least two versions of an ontological argument for the existence of God using modal logic. His first formulation occurred around 1941 when he was still in his thirties although he did not make this public until 1970 when he discussed it with Dana Scott and Oskar Morgenstern at a time he thought he might be dying. Gödel never published it during his life time, though it now can be found in his collected works and Dana Scott presented it in a seminar at Princeton in 1970. We describe a project activity for an undergraduate proof course aimed at lower division mathematics and computer science majors that expands upon the usual propositional and predicate logic present in such courses by including modal logic. In this way connections are made with philosophy, theology and the history of mathematics through introducing undergraduate students to Kurt Gödel's proof of the existence of God. Moreover, as a pedagogy, the project involves a broader range of critical thinking skills than is usual in such courses and affords opportunities to expose students to L^AT_EX and Writing Across the Curriculum efforts. (Received September 18, 2017)