

1125-M5-1528 **Dean Gooch*** (dgooch@santarosa.edu), Mathematics, Shuhaw Hall, Santa Rosa Junior College, 1501 Mendocino Avenue, Santa Rosa, CA 95401. *Why Courses in Proofs and Mathematical Reasoning need to be Taught at Two-Year Colleges.*

Courses in proofs and mathematical reasoning need to be taught at all two-year colleges that have significant numbers of students who choose majors that will require upper division mathematics courses at their four-year transfer institutions. Transfer students often find that they are shut out of proofs based upper division courses at their transfer institutions until those students have taken a proofs and mathematical reasoning class. The resident non-transfer student seeking upper division proofs based courses is expected to have completed a proofs and mathematical reasoning course prior to their Junior year. This often puts the transfer student at the disadvantage of having to spend three years finishing that student's Junior and Senior years of college. The speaker will discuss the barriers that make it difficult to offer proofs and mathematical reasoning courses at two-year colleges and share why it is essential to offer these courses to our students. (Received September 17, 2016)