1067-L1-1379 **Steven J Leon*** (sleon@umassd.edu), Mathematics Department, UMass Dartmouth, 285 Old Westport Road, Dartmouth, MA 02747. *The Second Undergraduate Level Course in Linear Algebra*. Preliminary report.

In this talk we will review briefly the recommendations made twenty years ago by the NSF sponsored Linear Algebra Corriculum Study Group. We will discuss what topics should be covered in undergraduate linear algebra courses and give reasons why we believe a second course in linear algebra should be required for all mathematics majors. The speaker will outline a number of alternatives for possible second courses. He will describe one such course where students work together in teams on projects and apply linear algebra to problems in areas such as digital imaging, computer animation, and coordinate metrology. Some of these projects may involve original undergraduate level research. (Received September 20, 2010)