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Scott A Stevens* (stevens@champlain.edu), Burlington, VT 05401. *An Innovative Course for Teaching Topics from Calculus III and Linear Algebra for Computer Science-Related Majors Utilizing Game-Programming Applications.* Preliminary report.

Providing a proper balance of industry-specific curriculum, general education, and a complete math sequence is difficult for colleges offering computer science-related degrees. This session will describe an innovative math course developed at Champlain College which helps our undergraduate computer science-related majors learn the most relevant math in the fewest number of credits. What started out as a math course for game-programmers quickly, and quite naturally, became a sequence of game programming objectives motivating the math topics I wanted to cover in a limited number of credit hours following a single Calculus course. After having taught this course many times I now believe that more math courses and topics should be motivated by such objectives. Due to the success of this course, and a simultaneous increase in retention, it is now part of the required math sequence for all of our computer science related majors. In this session I will present the details of our course called *Matrices, Vectors, and 3D Math: A Game Programming Approach*. I will demonstrate how a sequence of easy-to-code games can motivate much of the relevant material learned in Calculus III and Linear Algebra. A collection of student assignments and projects will be demonstrated using MATLAB. (Received July 06, 2012)