Title of Proposal: Preparation and Completion Study  
Principal Investigator: John Fulk

Introduction:  
Linear Algebra is one of the highest level mathematics courses offered at Georgia Perimeter College (GPC) and it is a very important course for STEM majors. Because there are so few sections of Linear Algebra offered each year at GPC and because most students who successfully complete Linear Algebra graduate from GPC or transfer to a four-year institution shortly thereafter, there are very few resources available to help students in this course. As such, workshops that focus on concept mastery and explore the uses of linear algebra in STEM fields could be very helpful and beneficial to students while they are here at GPC completing their coursework and also when they transfer to a four year institution by providing a solid academic foundation.

Activity Plan:  
In order to prepare students for further studies in STEM fields and successfully complete Linear Algebra, workshops will be held throughout the semester by the Primary Investigator (PI) of this study and will focus on mastery of course material and how linear algebra can be used in STEM fields. These workshops will include group problem solving competitions, question and answer sessions in which students can ask about topics that they are experiencing difficulties with and get answers or explanations, take-home challenge projects that require students to engage in critical thinking and apply several different concepts to solve a problem, and highlighting key concepts so that students will take note of their importance and use in future classes. The proposed dates for these workshops are: 2/7, 2/21, 2/28, 3/12, 3/26, 4/9, and 4/18.

Linear Algebra students from all campuses will be invited to participate in all workshops by the PI.

Evaluation Plan:  
To determine the effectiveness of the workshops, the PI will collect test grades and final exam grades and compare them to a target of 70% as well as college-wide course pass rates, and the PI will conduct a survey at the end of the semester to solicit student feedback about the workshops. Student grades will be collected on a voluntary basis by those participating in the workshops.