



### **Spring 2012 STEC 4500 Research Projects available with Dr. Anatoly Kurkovsky**

Recently GGC received a \$1,515,000.00 grant from the USA industry to support the college's academic activities with a newest ARENA simulation technology. I am planning to create a set of small interdisciplinary research projects for GGC students related to various aspects of systems analysis by using simulation approach.

1. Within the existing at GGC chemistry, biology, math, business and IT courses we will design and develop several case studies to demonstrate the benefits of simulation technology. It will help the students better understand how to use simulation approach for systems analysis in a particular discipline. Usually a professor from a particular discipline will be involved also.
2. Within the previously created special simulation model the students will conduct some components of systems analysis of GGC student enrolment dynamics and related GGC sustainability issues. The students can modify the simulation model and can prepare special scenarios.
3. On the basis of previously created by my GGC IT graduate (who won THE SECOND PLACE at the Student Research Contest at the 24th Annual Southeastern Regional ACM Computing Conference) simulation model, the students will analyze the GGC and local community relationship. The students can modify the model.