Specifications for the Design Course:

Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences and mathematics and engineering sciences are applied to convert resources optimally to meet a stated objective. Among the fundamental elements of the design process are the establishment of objectives and criteria, synthesis, analysis, construction, testing, and evaluation. The engineering design component must include most of the following features: development of student creativity, use of open-ended problems, development and use of modern design theory and methodology, formulation of design problem statements and specifications, consideration of alternative solutions, feasibility considerations, production processes, concurrent engineering design, and detailed system descriptions. Further, it is essential to include a variety of realistic constraints, such as economic factors, safety, reliability, aesthetics, ethics, and social impact. (Students must complete the project and submit a final report.)

I. TO BE COMPLETED BY STUDENT:

____________________________________________ ______________________
Name (Last, First, Middle)     PID     Quarter                      Year

College               Major

II. TO BE COMPLETED BY STUDENT AND INSTRUCTOR:

Prerequisite course work or knowledge for this project: (All the breadth courses and at least one depth course). Please indicate the depth course(s) you are using as prerequisite(s): __________________________________________.

Proposed plan (please be specific and make sure the plan satisfies the design specifications listed above):
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III. TO BE COMPLETED BY INSTRUCTOR:

Name of Instructor (Please print): ________________________________________________________________________________
Teaching Title (Please print): ____________________________________________________________________________________
Nature and Frequency of Contact: ________________________________________________________________________________

Signature of Student     Date   E-mail Address

Signature of Instructor     Date

10/10/2014