Leading Innovation Design Team (LINDT)

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Course Description: *A project design course that Complements and/or Builds on Core Engineering Knowledge with emphasis on Multi-disciplinary projects. All Projects will be sponsored, have clearly defined objectives, and must yield a Tangible Result at Completion. Project duration can vary between a minimum of 2 semesters and a maximum of 5 years. This course will afford the students the opportunity to use their creativity to innovate and to master critical skills such as: customer/user discovery and product specifications/requirements; concept development; trade study; systems engineering and design optimization; root cause trouble shooting; and effective team work. The students will also experience first hand the joys and challenges of the professional world. The course will be actively managed and supervised to represent the most effective industry practices with the instruction team, including guest speakers, providing customized lectures, technical support, and guidance. In addition, the students will have frequent interactions with the project sponsor and their technical staff. Now here's you're opportunity to think and act big while still in college!*

Course Resources: all materials will be provided on BB. In addition, we may invite or solicit assistance from other faculty and/or external subject matter experts.

Communications: all questions, concerns, issues… of general nature should be posted to the course's discussion board. For personal or project specific inquiries, we strongly encourage you to use office hours and/or make an appointment. Email should be your last resort.

Course Commitment: In the first two lectures, the course structure will be discussed and students will be clearly advised that this course and associated projects require

enrollment/commitment for at least 2 consecutive semesters. If you elect to remain in the course passed the drop out date in the first semester but choose not to register for the second semester, **your grade for the first semester will be W**.

Mandatory Lectures & Meetings:
1) The course commences with lectures on the design process and effective teamwork for all the registered students. Additional lectures will be provided as needed and may be project/topic specific.
2) There is a weekly meeting for each project that involves the student members and the instruction team. Whenever the team meets with the sponsor, there won't be another meeting for that week.
3) Key milestones (two events).
4) Final demonstration.

Locations: project space will be provided for each team.

Weekly Reports: each team will submit one weekly progress report on Blackboard. Presentations to the sponsor will substitute for the weekly report. All assignments are due as noted on BB. The progress report should include summary of: what was done, what's next, who's doing what (roles), schedule with milestones, action items, lessons learned, new discoveries, etc. A template will be provided. The bulk of these reports, in addition to any test and/or analysis results, can come from the meetings and discussions minutes. They should represent the diary for the life of the project and may contain just about any information that is relevant. However, this is not about quantity but quality. The weekly reports end 2 weeks prior to the first milestone.

Key Milestones: There will be two key milestones for each project. Completion dates will be posted on BB.

Final Presentation & Demonstration: Students will have to make a presentation and showcase their project during Design Day.

Final Report: A template will be provided but it should include at a minimum, a summary of the project and how it progressed (concept iterations, key experiments and results, final solution, and most importantly lessons learned). To help you better understand and appreciate this assignment, assume that you will be the team that will pick up your project for the next semester. This report should include all the information you will need to start making progress on your first day and know exactly what to do and not to do.

Course Feedback: we will ask every student to provide feedback on the good, bad, and the ugly for their experience in this course and we will do so twice in each semester. Your comments will be collected completely anonymously. This is extremely important to assist us in improving the course. Just like the design process, emphasizes the need and value of continuous engagement (feedback optimization) of your customer, you are the customer for this course.

Peer Review: best form for peer to peer accountability. This will be completed at the completion of each semester.

Grading Details: Late assignments will NOT be accepted. A one-time "forgiveness" will be considered but on a case-by-case basis and the end of the semester and only if it will impact the final grade.

Weekly Progress Reports	30%
Key milestone – I (Week of April 2, 2018)	10%
Key milestone – II (Week of April 16, 2018)	10%
Class Final Presentation & Course Feedback	5%
Final Demonstration	20%
Final Report	5%
Participation: aggregate score based on peer review, instruction team, and sponsor	20%
Total	**100%**