Suggestions for a Successful Senior Design Project

1. Assume the project advisor is one of your customers, not the project leader. The advisors have an abstract idea of what they would like at the end of the project. However, they don't know the optimal solution, and they are not exactly sure the best way to get there. This is a real-world problem; we need your talent to solve it!

2. The project will evolve over the course of the semester. Obtain your customers’ feedback several times during the semester to ensure their satisfaction at the end.

3. Apply the lecture material to your project. The lecture sequence has been designed to help your project succeed. All of the lectures are directly relevant to your project in some shape or form. Your mid-term and final report should illustrate how you have applied the lecture material to your project. For example, you must show the product design specification corresponding to the “Customer Based Design” lecture.

4. Ensure your mid-term and design show presentations are consistent with the guidelines of the Oral Presentation Workshop. In particular, remember most of the audience will have no previous background on your project; tell them all that they need to know.

5. Compile material for the final report from day one. Your final report is due the Friday before the design show. The report has the highest weighting of any contributor to your grade. The report can make the difference between an “A” and a “B”!

6. Plan on devoting the time frame of 1:30 to 5:30 PM every Tuesday and Thursday to this class, usually working on campus. While you will rarely if ever meet as a team for this entire span (see Item 7 below), this is an excellent time to work in the shop, research things in the library, run computer models, prepare presentations, and the like. Knowing that all your team members are available during this time is very helpful. Leaving early every session is demoralizing to the team. (Note that utilizing these time blocks takes care of about 8 of the 12 hour weekly time investment expected for this class.)

7. Do not feel that everything has to be done as a team. In fact, your progress will be slowed by this approach. Rather, use your team meetings as strategic planning sessions for sorting out individual and subcommittee tasks so that every individual’s time is utilized in the most efficient manner.

8. Make every effort to devote 12 hours a week to the project from the first week. You may be confused or lack direction for the first couple of weeks, but investing the expected time wrestling with the problem will result in improved productivity at the end.

9. If you are not clearly assigned a task for the week, ensure that you figure out how to contribute for yourself. The team leaders and the project advisor are facilitators, not dictators; it is your responsibility to be sure you contribute to the project every week.

10. Do not be concerned if your team undergoes some controversy at some point. In fact, some (but not all) of the best teams we have advised in the past have undergone a “battle” at some point. This may be necessary to work out mutually agreeable expectations.

11. Always feel free to consult with the project advisor, the course coordinators, or the teaching assistants to assist in any difficult situations.

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