Work Plan (Section 8 in Junior Reports) Contents
BE-301, Dr. C. S. Tritt, Winter '08-'09

This section is intended to provide your reader with both a general understanding of your team's plan for completing your project and the specifics of your plan.

The educational and commercial outcomes subsection should consist of one to several paragraphs. What I'm looking for in this subsection is a summary of what you plan to get done on the project. The minimum expectation would be a reasonable market and completive product evaluation, a comparison of several technical approaches to one or more key aspects of your device, a consideration of codes, standards and ethical implications of your project, a rather complete list of functional specifications for your device, a beta (second generation) prototype of your complete device (or with permission of your instructor, just the key subsystems of the device), test results obtained using the prototype (does it meet your specifications?). Additional outcomes you could list include (but are not limited to) a business plan for going from your beta prototype at graduation to a commercial product after graduation, a grant proposal for funding your project, trips to test your prototypes in the environment (nation) in which it is intended to be used, plans to investigate the possibility of applying for patents on key aspects of your device or its design, etc.

The process subsection is a paragraph or two describing in very general terms how you plan to achieve the outcomes listed in the previous subsection. Do you plan to work sequentially or in parallel (often called extreme development in which you work on some tasks that may ultimately not be used in order to shorten the overall development time)? How are you going assign tasks to people – are you going to make each team member a specialist on some part of your design – or will people take on responsibilities based on interests and availability as needs arise? This section is your team's philosophy of design. It connects the outcomes in the previous subsection with detailed schedule in the next subsection.

The next subsection is a specific schedule with non-overlapping individual task assignments and deliverables. The purpose of this schedule is to keep you on track, allow evaluation of individual performance, improve team communications, etc. It's okay to have a backup person or assistant, but the responsibility for each major task needs to be assigned to an individual. Each major task most also include a deliverable so that individual performance can be evaluated. This subsection should also include a list of major project milestones with scheduled completion dates either as part of the assignments table or as a separate document.

Major Milestones (generally the culmination of multiple tasks) include but are not limited to (with dates subject to change and/or your discretion):

- Have an alpha prototype of the most critical system in your design by end of spring quarter 2009.
- Have a test plan for the alpha prototype by the end of spring quarter 2009.
- Continue to work on getting funding, if so desired. This really needs to be done by the start of fall quarter 2009 if it is to be of any value.
- Complete testing of alpha prototype by the end of fall quarter 2009.
- Complete the alpha prototype testing by the end of fall quarter 2009.
- Complete 1st design review report by 2nd week of fall quarter 2009.
- Complete 1st design review by 4th week of fall quarter 2009.
- Complete 2nd design review report by 2nd week of winter quarter 2009-10.
- Complete 2nd design review by 4th week of winter quarter 2009-10.
- Start work on the beta prototype by the end of fall quarter 2009.
- Work on getting IRB approval if you plan to do any human subject testing. This should be done by the start of winter quarter 2009-10.
- Have a beta prototype of the complete system (or selected subsystems with instructor approval) by the end of winter quarter 2009-10.
- Have a test plan for the beta prototype by the end of winter quarter 2009-10.
- Complete beta prototype testing by week 5 of spring quarter 2010.
- Complete final design report and poster by week 8 of spring quarter 2010.
- Present your "final" prototype (possibly modified from the beta version) at the end of spring quarter 2010.
- Graduate, get a great job, make millions and send a little back to MSOE.