## ECE 480 – Senior Capstone Design Teams Electrical and Computer Engineering Judging Criteria, April, 2008:

(i) Criterion 1 – 25 Points. This criterion focuses on your overall technical approach, creativity, and originality in executing the technical design and meeting non-technical (cost and schedule) goals of the projects. To maximize your points, the evaluators will look for answers to the following questions from your technical report, Chapter 1:

- What are we trying to do? -- Chapter 1
- What is the problem we are trying to solve? Chapter 1
- How is it done today, and what are the limitations of current practice? Chapter 1
- What is new in our approach, and why do we think it will be successful? Is the solution creative, and why?
  <u>- Chapter 1</u>
- How much did the prototype cost, and why was it different than our expected cost? Chapters 1 and 5
- (ii) Criterion 2 40 points. This criterion will evaluate the level of technical skill, teamwork, and dedication manifested in the completed project. To maximize your points, the evaluators will evaluate thoroughly Chapters 2, 3, 4 of your report. Since this criterion will draw considerably from your final report, it is also an assessment of how well you *documented* your work in the report.
  - What was your design concept in software and hardware? How did you implement your FAST diagram?
  - If you changed your approach or design during the project, explain your reasons.
  - What was technically challenging about the project? What were the test results (Chapter 4)? What was (were) the hardest requirement(s) to meet?
  - If you didn't meet them, or the project didn't work as expected, why and what could a future team do better? (From Chapters 2, 3, 4, 5)
  - What did each of the team members *technically contribute* to the project? (from Appendix I)
- (iii) Criterion 3 20 points. This Criterion will examine your attention to non-technical aspects of the design such as cost, marketability, social impact, and manufacturability. Ideally, there should be enough information in Chapters 1-5 for the evaluators to address these non-technical details. This will also address the question "Assuming we are successful, what difference does it make to society, the market place, and your sponsor's business"?
- (iv) Criterion 4 15 points. Professionalism in the poster and oral presentation of the design project. This criterion will be based on the visual and oral quality of your POSTER SESSION in the hall and the ORAL PRESENTATION to your peers and the judges. Since you will be pulling visual materials and documentation from the final technical report, we expect a great deal of similarity to what you document in the final report and the presentation. If there is a great deal of new material in the posters/presentations that is *not* reflected in the final report, this may result in a lower score on Criteria 1 and 2.