EE 497 Class Project Statement

For one medical device of your choice (and approved by the course instructor), please do the following:

- a. Describe briefly the theory of operation in English. (1-2 pages 10%)
- b. Describe its utilization and operation in clinical use (i.e., how the healthcare personnel use it). (1-2 pages 10%)
- c. Provide the block diagram of a practical design of the chosen device and describe the functions of main blocks and their technical design specifications. (3-4 pages 20%)
- d. Provide practical alternatives and sources for the design of each of the main blocks in the design that meet their required technical specifications. (4-8 pages 40%)
- e. Provide an assessment of how human factors engineering principles can be taken into account in the design of the chosen device. (1-2 pages 10%)
- f. Describe how sterilization can be assured in the design and use of the chosen device. (1-2 pages -10%)

Important Notes

- 1. It is required to submit your project report and presentation by May 1, 2015. Presentations will be scheduled shortly after this date.
- 2. The project evaluation will amount to 20% of your term grade.
- 3. You are required to submit the project in electronic format only (i.e., by electronic mail to instructor no hardcopies will be needed or accepted). The project output should include a report in PDF format and a one-hour presentation for each group. No additions or modifications to the report or the presentation will be allowed after the deadline.
- 4. You must use your own words in the report with clear reference citation. "Copy-Paste" items without references will not be accepted and will be considered as plagiarism. Plagiarism/cheating in a major ethical violation that may result in a failing grade for the offending project group. Please refer to this <u>web site</u> for more information on plagiarism.