

# EE513(Spring, 2016) Project Guidelines

## Important Dates

1. June 8th : project presentations.
2. June 13th: project report due.
3. June 13th 8:15 am-9:45 am: final exam.

Table 1: Presentation Schedule

Name	Date	Time
Ke MENG	June 8th, Wed.	8:15-8:30
Liang YU	June 8th, Wed.	8:30-8:45
Zhiqing LI	June 8th, Wed.	8:45-9:00
Kang ZHAO	June 8th, Wed.	9:00-9:15
Ming SHANG	June 8th, Wed.	9:15-9:30
Chen CHEN	June 8th, Wed.	9:30-9:45
Mingming CHEN	June 8th, Wed.	9:45-10:00
Peiqing HAN	June 8th, Wed.	10:00-10:15

\*Note: Each person has 13 minutes to present his/her work, 2 minutes to answer questions.

## Grading Considerations

1. Level of problem difficulty.
2. Originality of solution.
3. Depth and rigorousness of analysis
4. Clarity of presentation/explanation
5. Scholarly introduction (appropriate bibliography)

## Project Final Report Guidelines

1. Page limit: 10 pages
2. Font size: minimum 11 point
3. Due date: June 13th, Monday (Before the final exam)

The report should be written as if it were a submission to a technical conference. This means a professional presentation, proofread English, full explanations and well-chosen graphics to demonstrate your point. The limited format requires you to select the best demonstrations of your success and to consider the best way to describe and present your results.

While there are many different types of conference paper, we are interested in the subtype and critically evaluates a previous approach and presents an improvement or useful modification to it. Not all of you will have produced an improvement, but what I am looking for is a demonstration of a well-considered, scholarly approach to converter circuit analysis, the ability to clearly explain the design considerations.

**Report Structure** Expected sections of the paper include (but are not limited to):

**Introduction** - Where you introduce the field of interest and explain the need for the converter in question. This is where you discuss different approaches to the problem and introduce a particular example power converter from the literature. References are expected here, demonstrating that you have considered what solution exist in the literature.

**Background** - This is where you focus on a specific example circuit in the literature and critically evaluate what features you would like to improve or analyze. This means you will have to briefly describe their converters.

**Experiments/Improvements** - This is where you introduce what you are doing and explain why. This is also where you offer your mathematical analysis. It is expected that you show at least a few questions describing what your system does. This does not mean that you copy the equations in from the reference articles. This is where you must state your goals for the improvements.

**Simulations** - Demonstrate that the converter works. Carefully choose the simulations and data to demonstrate how your converter achieves the goals you set out. You will have to decide which signals to show. Showing everything is usually a big mistake due to the loss of clarity. Use color judiciously and avoid figures with black backgrounds. Think about how to logically lead the reader through the series of simulations.

**Conclusions** - Keep these brief, but provide a perspective on what you have just done.

\*Note- The Introduction and Background should not take up more the 2/5 of the report!