Proof of Concepts

You will have an entries with the following format for each of the required concepts.

# Concept name (i.e. Operational Amplifier as a Comparator)

Building Block: Short description and schematic

Clearly label all nodes you will reference for example

## Analysis:

Equation and short description.

Describe clearly how you are applying the concept

## Simulation:

Screenshot of simulation

Clearly labeled with nodes and/or input/output that matches with schematic above. Any important portions of output are identified (i.e. the point at which a comparator switches is circles and/or point to with labeled arrow for easy identification).

## Measurement:

Screenshot of Waveforms output from circuit above.

Remember to clearly show all axes in a measurement plot. Also identify any important portions of the output.

## Discussion (and answer related questions in Alpha Lab):

Comparison of Analysis, Simulation and Measurement results. Both a simple summary of results (like a numerical chart of values) and a simple description that details if the results are as you expect. Also include any speculation as to why they may be different from one another if they are different. What variation is too much for example…explore this.

# Concept name (i.e. Bridge Circuit)

Building Block: Short description and schematic

Clearly label all nodes you will reference

## Analysis:

Equation and short description.

Describe clearly how you are applying the concept

## Simulation:

Screenshot of simulation

Clearly labeled with nodes and/or input/output that matches with schematic above. Any important portions of output are identified (i.e. the output of the point at which the bridge is balanced in a parameter sweep).

## Measurement:

Screenshot of Waveforms output from circuit above.

Remember to clearly show all axes in a measurement plot. Also identify any important portions of the output.

## Discussion:

Comparison of Analysis, Simulation and Measurement results. Both a simple summary of results (like a numerical chart of values) and a simple description that details if the results are as you expect. Also include any speculation as to why they may be different from one another if they are different. How different is too much for example…explore this.