

EE 491 WEEKLY REPORT 1

Date: 2/8/2016

Group number: DEC1619

Project title: Drive Circuitry for Ultrasound Brain Simulator

Client &/Advisor: Dr. Bigelow

Team Members/Role: Zechariah Pettit – Team Webmaster, Honghao Liu – Key Concept Holder, Miguel Mondragon – Team Leader and Webmaster

✓ Weekly Summary (Short summary about what you did this week)

Had second meeting with Dr. Bigelow. Discussed further specifications of desired outputs and given inputs as well as discussed recommended testing methodology and had a discussion on general outlook to take when working on the project. Individual group members worked on their assigned parts.

✓ Past week accomplishments (please describe as what was done, by whom, when)

- ❖ Group met with Dr. Bigelow at 9AM on Wednesday to clarify certain specifications of project and discuss preferred methodology for testing theories and designs.
- ❖ Group decided to cancel weekly team meeting as all members agreed that there was nothing pertinent to discuss and instead focused on personal research for the time slot.
- ❖ All group members worked on their individual circuit portions and the designs for them. Honghao is working on the splitting of our initial input signal and is researching additional methods to do so. Zech is working on amplifier circuits designs and has obtained a microcontroller kit to simulate the expected inputs to his circuits. Miguel has done further research on low pass

filters for the circuits and done research into the necessary op-amps for the project.

✓ **Pending issues (if applicable)**

- ❖ None
- ❖ X
- ❖ X

✓ **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Honghao Liu	Professor Meeting, Individual Assignment Research	2	6
Miguel Mondragon	Professor Meeting, Individual Assignment Research	2	7
Zechariah Pettit	Individual Assignment Research	2	6

✓ **Comments and extended discussion**

None.

✓ **Plan for coming week (please describe as what, who, when)**

- ❖ Meet with Dr. Bigelow at 9AM on Wednesday.
- ❖ Miguel Mondragon is planning to have the initial plans for the low pass filters done by the time of meeting with Dr. Bigelow and intends to spend the week constructing and doing some introductory physical testing.
- ❖ Zechariah Pettit will be doing further design work on his amplifier circuits and presumably attempting physical testing.

- ❖ Honghao Liu will continue research for his signal splitting ideas and intends to work on a Simulink model for his theories during this week.

- ✓ **Summary of weekly advisor meeting (if applicable/optional)**

Meeting was an hour long. Discussed further needed specifications that were missing from previous documents provided and discussed our ideas on testing the circuits. In addition discussed a few educational ideas and some other assorted ideas for the project.