

## **Senior Design Project 12317 – Nanomanipulator**

### **Minutes from meeting held on 1/25/12**

Present:

Brad Ling  
Rob Hughes  
Sabine Loebner  
Brad Olan  
Jaclyn Bastardi

Meeting ran from 4-5 PM in Senior Design Lab

1. Sabine presented info on stepper motor and controls. Found motors cable of degree turns we need that seem easy to operate and our affordable.
2. Rob discussed concern over lead screw having plastic nuts. Applications engineer at company said would be fine with support rails. Less than \$100 per lead screw.
3. Manipulator sliders discussed. Difficulty will be mounting a third axis. Cube design proposed by Rob but it seems to have too much volume.
4. Calculations were done to determine if stepper motor torque is sufficient. Deemed that torque of motor is a concern and needs to be discussed with vendor.