**Day 3: Semiconductors - In-Class Activity**

**Group # \_\_\_ Group Names:**

**Pre-Class Assignments:** 2-D materials Video, Cliff Kuant *Wired Magazine* article, short interview about digital technology use.

**Activity Objective:** Examine the interrelated nature of culture and materials engineering.

**Using your interview data, discuss ways to design more experience-centered digital technologies using graphene. Make sure that you submit your homework and individual interview notes with this group assignment for full credit.**

**Part 1 – The affordances of MoS2.** How could using MoS2 instead of silicon affect the speed, weight, and other aspects of semiconductor technologies?

**Part 2 – Interview data.** (2A) What are the main themes in how your interviewees spoke about delegation and digital technologies in their daily lives?(2B) What do people wish they could do with their digital technologies? (2C) What concerns do people have about their use of digital technologies?

**Part 3 – Experience-centered design.** Combine your discussions from Part 1 and Part 2 to choose one potential use of MoS2 that would address a social need that emerged from your interviews. What is this application? Making sure to address your findings in Part 2, discuss what kinds of features your product would have, and what kinds of features your product would avoid.

**Your grade will be based on the following criteria**

Grading Rubric.

5= Responses are appropriate, comprehensive, and indicate thoughtful engagement with the information and concepts from the lecture, readings, and videos. Novel ideas, creativity, and attention to complexity are a plus.

4= Good effort. Responses and arguments are not as clearly presented, or as comprehensive and thoughtful as in a full credit answer.

3= Responses are less appropriate to the assignment, less thoughtful and engaged, with less complete information. Errors in grammar, punctuation and or sentence structure will also result in loss of points.

2= Responses are incomplete, showing little effort, thought, or use of preparatory materials.

1= Responses are not consistent with preparatory materials. Assignment is badly incomplete. Next to no effort.