Oakland University
School of Electrical & Computer Engineering
Fall 2022
ECE 4721/5721
Professor Phares Noel, Ph.D., PE

Homework Zero
Due on 9/9/2022

Instructions: Answer the following questions on the Course Outline. Once completed, upload your answers on Moodle as a MS Word Document.

1. Write down the dates for Exam 1, Exam 2 and Final exam. Note these dates in your calendar.

2. Read the objective of the course from the course syllabus. Write at least one objective of the course that you like the most.

3. Do you know that the attendance is taken in every class?

4. Do you have any comments on the Course Outline?

5. Watch the PPT presentation on "Embedded Systems Overview" by Dr. Subra Ganesan, and answer the following questions.

   a. What is an embedded system?

   b. What are the advantages of microprocessor based embedded systems?

   c. What possible implications will Embedded Controllers have on personal privacy.

   d. What are the typical challenges in Embedded Systems design?

   e. What is the most interesting application of Embedded Systems that you have come across?

6. What at this moment the largest electronic chip, and how does the ARM based Cortex M0+ compare to it? Discuss the fabrication node, transistor count, core count, power consumption, cooling needs, etc.