To: Mechatronics students
From: Mechatronics T.A.s
Date: November 6, 2000
Subject: Sensor labs report

The purpose of this memorandum is to inform the students of ME EN 3200 Mechatronics what is expected on the report regarding sensors. The objective of the report is to examine the methods and procedures used to implement the sensors, to present the results derived from their testing, and to discuss their potential applications and limitations when implemented with your mobile robots. Specifically, your report should examine three methods of sensing: infrared detectors, ultrasonic sensors, and potentiometers/tachometers. Potential applications of these to your robots could include determining the location of an opponent, the location of a light bulb above the center of the ring, and link position or velocity. Feel free to imagine additional applications.

The structure and evaluation of the sensors report will be similar to your previous Mechatronics lab memos. Formatting of the report should follow the same guidelines, with one exception: Report length should be 3 pages or less. Since the report represents several weeks work, it will be worth 200 points, which is twice the value of a normal report. The report will be due one week following the position/velocity experiments in lab. An extension of one week may be granted on a person by person basis, but written permission from your TA is required. **Requests for the extension must be made at least 24 hours prior to the report due date.** Email correspondence is best.

Feel free to address any questions regarding this report in class or lab. Email correspondence is also very efficient.