

# **Mechatronics (ROB-GY 5103)**

## **Midterm: Materials Preparation**

Fall 2023 — Section A — 3.0 credits

You are responsible for bringing the following components for the practical hands-on portion of the exam. The instructor is **not responsible** for supplying extra equipment should any component malfunction. The student is thus encouraged to bring extra components in addition to minimum recommended quantities below. Contact the TA if you have questions.

1. **BS2 Microcontroller**
2. **Board of Education**
3. **Power Source** (Power Adapter or 9V battery for Board of Education)
4. **USB cable**
5. **Resistors** (at least 3 of each category below)
  - a.  $220\ \Omega$
  - b.  $470\ \Omega$
  - c.  $1k\ \Omega$
  - d.  $10k\ \Omega$
6. **Capacitors** (at least 2 of each category below)
  - a.  $0.1\ \mu F$
  - b.  $100\mu F$
7. **LEDs** (at least 3, color does not matter)
8. **Pushbuttons** (at least 2)
9. **Jumper Wires**