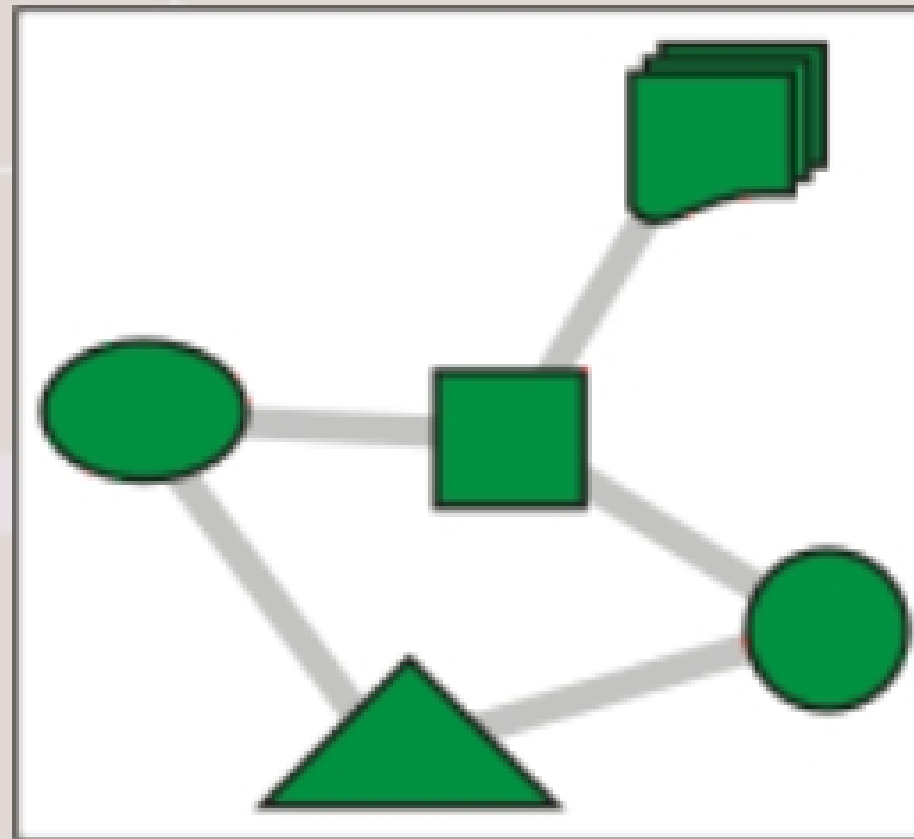
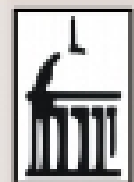


# Introduction to Wireless Sensor Networks



## Energy Considerations in WSNs I

3 February 2005



# Organizational

## Class Website

[www.engineering.uiowa.edu/~ece195/2005/](http://www.engineering.uiowa.edu/~ece195/2005/)

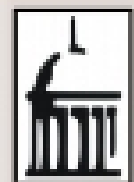
## Class Time

Monday	4:30-5:20	Room 4511 SC
Thursday	12:30-1:20	Room 3220 SC
<b>Please note that the room numbers are different for Mondays and Thursdays.</b>		



## Office Hours

Monday	5:20-6:20	Room 1126 SC
Thursday	1:30-2:30	Room 1126 SC
Other	By appointment	Room 523C SHL



# Organizational

- **Class Topics (3 students/per topic)**
- **Students read and help prepare a lecture on one of:**
  - **ZigBee Protocol**
    - Brief overview
    - Example application
  - **What is RFID?**
    - Brief overview
    - Explanation of terminology
  - **Sample Energy Budget**
    - Worked example of energy considerations in WSNs
  - **Directed Diffusion**
    - Explanation of the algorithm
  - **Overview of TinyDB**
  - **Sensor Characteristics**
    - Soil moisture, temperature, humidity, wind speed, vibration
  - **Analog/Digital Conversion**
    - Number of bits, linearity, sampling rate, power, etc.
  - **Smart Dust**
- **Will post a signup sheet**

