

ECGR 4101/5101 - ~~LECTURE 11~~ LECTURE 11 ①

ADC = 10 bits

0 → 5V

→ ? V per bit?

$$\frac{2^{10} \text{ levels}}{5\text{V range}} = \text{or is it } \frac{5\text{V}}{2^{10} \text{ levels}} = \frac{.00195\text{V}}{\text{level}}$$

4.88 mV/level ←

Readings

10 1111 1011 →

3.723V

463

ECGR4101/S101 - LECTURE 11 (2)

Write the ^ccode to set up an
ADC → continuously sweep all 8 port bits,
sample & hold, $f_{AD} = \phi_{AD}$, ADC port
P0, 10 bits, $V_{ref} = 5V$ (board 5V)
No interrupts.

adcon0 = 0x18 ; ← 98 or 18 allowed

00011000

adcon1 = 0x3B ;

00011011

adcon2 = 0x05 ;

00000101