ECE 447: Control Systems (Fall 2021)

Prof: Sam Burden TA: Sat Singh

today: ☑ logistics: HW0 due Fri Oct 8
HW1 due Fri Oct 15

☑ group work

☑ break — back @ 1:30p

☐ office hour

Prof Burden TODO: ☐ send HW sols to TA, grader
☐ clarify HW1 p2b

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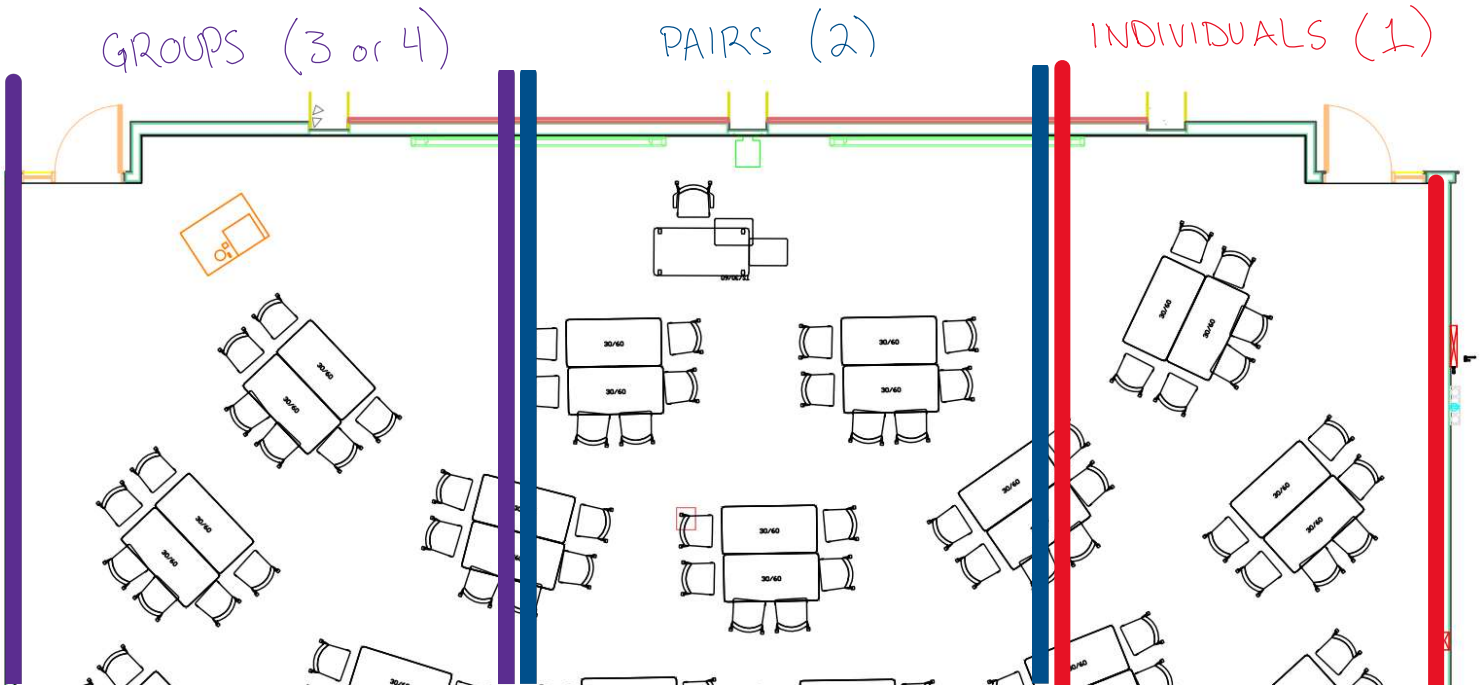
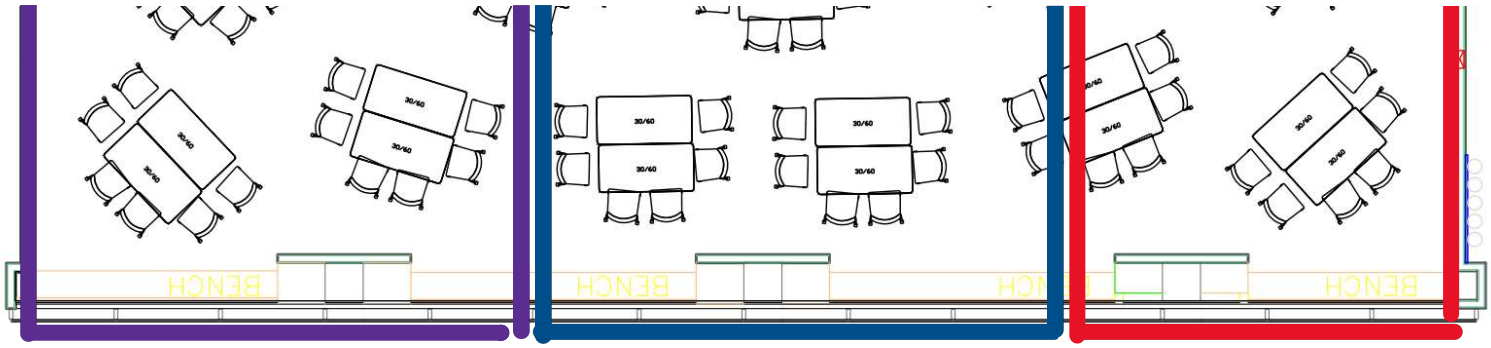
group work





$F = M \cdot A$ F - force A - acceleration M - mass

$F = \tau - \beta \cdot V$ V - velocity τ - throttle

$A = \dot{V}$

$M\dot{V} = \tau - \beta \cdot V \iff \dot{V} + \frac{\beta}{M} V = \frac{\tau}{M}$

$\Updownarrow$

$\dot{y} + ay = bu$