# Digital Systems Fundamentals

The extra grade approach – Pedro Julián

Spring 2019, JHU

### Organization

- Context
  - Freshmen class
  - EE, CS, Biomed, Mech-E, Peabody
- Hands-on class
  - Mon-Wed: regular lecture
  - Fri: in-classroom lab



## Organization

- Grading
  - Midterm 20%
  - Final project 40%
  - Labs & HW 40%



#### Organization

- Grading
  - Midterm 20%
  - Final project 40%
  - Labs & HW 40%
  - Extra grade: 20% (flexible)
    - They need to help with special projects



#### Extra grade

- Two objectives:
  - 1) learn more;
  - 2) better grade
- One 1-hour meeting per week.
  - They might put more hours







#### GRADING

#### • main message: if you work hard you'll get a good grade

• The best aspect of the course is the opportunity for learning. The class removes the focus from grades and allows students to work with a low-pressure environment.

- · Being able to build the circuits and see the ideas that were discussed in class.
- · i learned a lot
- · Getting hands-on experience with building circuits

Pedro is without a doubt one of the best professors I have had. He is such a great guy who loves his job and truly cares about your understanding of the course. He is very likable and makes himself very approachable. The general support from both Pedro and the TAs is amazing. He understands that students are too focused on grades, and so he makes it very achievable to obtain a good score in the course so that you are more concerned with the actual learning aspect. I distinctly remember him saying in the first lecture, that if you promise to work hard, you will get a good grade. That aside, I most enjoyed the hands-on projects of the course. I would say it is 70% hands on, and 30% theory.

#### Grade distribution (SP17)



+ extra grade

Bin	Reg	w/Extra	%
75	3	3	0.00%
80	0	0	0.00%
85	6	3	50.00%
90	7	6	14.29%
95	10	6	40.00%
100	15	25	-66.67%

#### Grade distribution (SP17)



#### Grade distribution (SP18)



Bin	Reg.	w/Extra G.	%
75	0	0	0.0%
80	2	2	0.0%
85	5	4	1.8%
90	13	10	5.5%
95	13	8	9.1%
100	22	31	-16.4%



#### Grade distribution (SP18)



SP 2019: 30 students enrolled

#### 2017 Vs. 2018

Grade distribution









#### Grade distribution