

AUGUST 31, 2020

## QUESTIONS DURING LECTURES:

TYPE QUESTIONS IN CHAT & ASSISTANT (BETH POWELL) WILL ANSWER THEM. BEST IF YOU CAN TYPE A PRIVATE MESSAGE TO HER.

## SYLLABUS INFORMATION:

### RESOURCES:

#### SCHEDULE EXAMS

NON-CUMULATIVE.

4 EXAMS

MADE UP OF T/F & MULTIPLE CHOICE

WILL BE DONE VIA PROCTORIO

#### HOMEWORK

DUE DATES & CHAPTERS COVERED EACH WEEK

MYLAB & MASTERING

#### PRE + POST QUIZZES

1% GRADE BOOST FOR EACH.

#### RECITATION INFORMATION

RECITATIONS ARE ON THURSDAYS

NEED TO SIGN UP TO ATTEND

WILL ALSO BE ONLINE VIA ZOOM

WILL ALSO BE RECORDED

#### FORMAT:

TA WILL REVIEW A SERIES OF PROBLEMS (WILL BE SIMILAR TO EXAM QUESTIONS).

OPTIONAL BUT HIGHLY ENCOURAGED.

#### HOMEWORK HELP

FEEL FREE TO BRING UP HOMEWORK PROBLEMS IN RECITATION.

#### LAB

WILL NOT START UNTIL WEEK 3.

LAB MANUAL IS AVAILABLE IN THE BOOK STORE AFTER LABOR DAY.

## CHAPTER 20

### ELECTRIC CHARGE

### COULOMB'S LAW

### ELECTRIC FIELDS

### CHARGES

#### ELECTRIC CHARGE

##### FUNDAMENTAL PROPERTY OF MATTER.

TWO VARIETIES: POSITIVE & NEGATIVE

##### ELEMENTARY CHARGE (e)

PROTONS CARRY POSITIVE CHARGE

ELECTRONS CARRY NEGATIVE CHARGE

QUAKE - MAKES UP PROTONS, NEUTRONS & OTHER PARTICLES.

CARRY  $\pm \frac{1}{3}e$  OR  $\pm \frac{2}{3}e$

PROTONS ARE MUCH  
LARGER THAN ELECTRONS  
EXACTLY EQUAL.

NEUTRONS = NEUTRAL  $\rightarrow$  NO CHARGE.

##### CHARGE CONSERVATION

COULOMB (C) - SI UNIT OF CHARGE.  $- 6.25 \times 10^{18}$

##### COULOMB'S LAW

$$\vec{F}_{12} = \frac{k q_1 q_2}{r^2} \hat{r}$$

LIKE CHARGES REPEL. OPPOSITES ATTRACT