



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ACTIVITY BASED LEARNING

Course Code & Course Title : 19EC304/ Electromagnetic Fields
Year/Sem/Branch : II/ IV/ECE
Name of Faculty : Ms Chithra S
Designation : Assistant Professor
Unit Title : Static Electric Field
Topic : Coulombs Law
LO : 1
Bloom's Taxonomy Level : 2

S.No.	Title	Description
1	Concept	The magnitude of the electrostatic force of attraction or repulsion between two point charges is directly proportional to the product of the magnitudes of charges and inversely proportional to the square of the distance between them
2	Challenges Faced	Since charges cannot be visualized in real time, it was a challenge to make the students understand imaginary concepts.
3	Name of the Activity	Interactive simulation
4	Description of the Activity	The students were made to visualize the electrostatic force that two charges exert on each other by performing a simulation in an online platform developed by University of Colorado (https://phet.colorado.edu/en/simulation/coulombs-law) It was observed how changing the sign and magnitude of the charges and the distance between them affects the electrostatic force
5	Feedback from Learners (Consolidated)	The students felt it attractive as it was a real-time simulation where they were able to observe the forces by changing the charges manually. They preferred learning other topics too in a similar way
6	Feedback of the Faculty about this activity	In traditional method, the topic would be explained by working out a problem and writing equations. By implementing, ABL the interest toward the subject has improved. Also, students were keen to learn the concepts.

Signature of the Course Faculty

Signature of HOD

Evidences/Proofs :

