The Islamia University of Bahawalpur

Course Plan

DEPARTMENT OF COMPUTER SCEINCE

Class: **Semester- 1st**

Instructor	Sharaf Mehmood	Email: Sharaf_mehmood@yahoo.com	
Course Title	Applied Physics	Program	BSCS 1st semester
Course Code	CSIT-01102		

SEQUENCE OF TOPICS COVERED

S.no	Lecture Week	Topics (outline of main topics and sub topics)
1	**WEEK 1**	Introduction Electric Field Coulombs Law Conservation of charge
2	**WEEK 2**	Quantization of charge (Presentation) Electric Field Due to Point charge Numerical Electric Field due to Electric Dipole
3	**WEEK 3**	Electric field due to ring of charge Electric Field due to disk of charge Assignment (Gauss Law)
4	**WEEK 4**	Electric Flux Electric Flux through open Surfaces Gauss Law (presentation) Quiz
5	**WEEK 5**	Electric Potential Electric potential Gradient Electric potential due to dipole
6	**WEEK 6**	Electric potential due to Point charge Capacitor Calculating Capacitance
7	**WEEK 7**	Capacitor of parallel plate capacitor Cylindrical capacitor Spherical capacitor Capacitor in parallel and in series
8	**WEEK 8**	Capacitor examples Assignment Introduction to magnetic field Magnetic field examples
9	**WEEK 9**	Faraday law Assignment Presentation quiz

10	**WEEK 10**	Ampere's Law Magnetic Field outside a long straight wire with current Magnetic Field inside a long straight wire with current Quiz
11	**WEEK 11**	Inductance Inductance of Solenoid Self induction Mutual induction Assignment
12	**WEEK 12**	Presentation Quiz Energy Band theory in solids Classification of material on the basis of Energy gap
13	**WEEK 13**	Semiconductor Intrinsic semiconductor Extrinsic semiconductor
14	**WEEK 14**	Electric current Current density Resistance Resistivity and conductivity
15	**WEEK 15**	The displacement current Reflection and refraction of light waves Diffraction from wave theory