MESSAGE FROM THE INSRTUCTOR

FUNDAMENTALS OF PHYSICS III

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In NU, this is the third and last of a series of courses that cover the Fundamentals of Physics, introducing the concepts and laws of electricity and magnetism. Electricity and magnetism are important for understanding nature and are essential in science and engineering.
Students learn the fundamentals of electricity and magnetism and its mathematical descriptions and will be able to solve a range of problems in electricity and magnetism. By the end of this course, students will be able to: 1) Understand the concepts of electric fields, electric potential, capacitance, current and resistance, magnetic fields, induction and inductances, etc.
2) Understand Coulomb's law, Gauss' law, law of Biot and Savart, Ampere's law, Faraday's law, Lenz's law, etc., and solve actual problems in electricity and magnetism.
3) Find mathematical solutions to problems in electricity and magnetism expressed by equations and explain the physical meanings of the solutions.