PHYS-1312 Introduction to Electricity, Magnetism And Waves

A calculus-level introduction to electric fields, magnetic fields, and light waves. Topics include: electric fields, Gauss's Law, electric potential, magnetism, Ampere's Law, electromagnetic induction, Lenz's Law, Maxwell's Equations, geometrical and physical optics. This course is appropriate for physics and engineering science majors. Only one of PHYS 1310 or 1312 may be taken for credit. Prerequisites: PHYS 1311 (or 1309) and MATH 1312 (may be taken concurrently). Corequisite: PHYS 1112 must be taken concurrently.