ECEn 360
Homework #10

1. A laser beam has a wavelength of λ=500nm, an electric field amplitude of $\left|\vec{E}\right| = 2\ V\ /\ m$, and is right hand circularly polarized. The laser beam is incident onto a layer of rutile, which has a refractive index of n=2.6 at an incident angle of $\theta=\tan^{-1}(2.6)$=68.96 degrees. (See Figure 1)
    a. What is the electric field phasor of the transmitted laser beam?
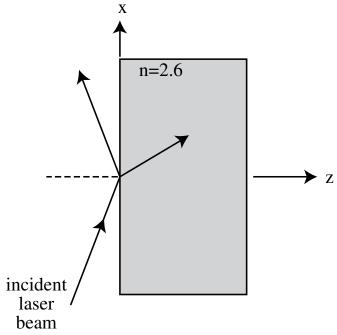   b. What is the magnetic field phasor of the transmitted laser beam?

Figure 1

Text: Problem 9.1
Text: Problem 9.3