## Preparation Assignments

## Due Monday, November 25

Determine the phasor and time domain electric field expressions for a 1.5 GHz plane wave propagating in the $z$-direction through dry soil. The wave is polarized in the $x$ direction.

How far does the wave propagate for 3 dB attenuation?

## Due Thursday, November 28

How many pounds of turkey did the F\&W I Fall 2002 class consume today?

## Due Monday, December 2

An $x$-propagation $z$-polarized plane wave propagating through air is normally incident on glass. Determine the phasor form of the total electric field in air.

## Due Wednesday, December 4

For Monday's geometry, what percentage of power is transferred into the glass?
If the wave is perpendicularly polarized with a $45^{\circ}$ angle of incidence, what percentage of power is transferred into the glass?

If the wave is parallelly polarized with a $45^{\circ}$ angle of incidence, what percentage of power is transferred into the glass?

