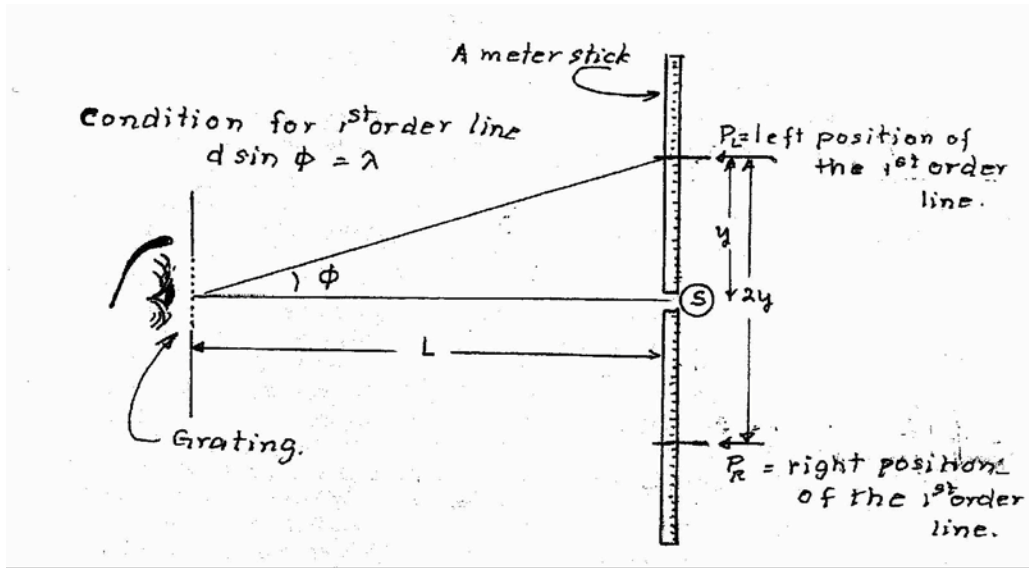


# PHYSICS 1040L EXPERIMENT 10

## MEASUREMENT OF THE WAVELENGTH OF LIGHT

Date Performed \_\_\_\_\_ Name \_\_\_\_\_ - Partners Name \_\_\_\_\_



$N$  = Number of Lines per unit length = \_\_\_\_\_

$d$  = The separation of adjacent lines  $1/N =$  \_\_\_\_\_ (m)

$L$  = Distance between screen and grating = \_\_\_\_\_ (m)

COLOR ( $\lambda_s$ )	Blue	Green	Yellow
Position Left $P_L$			
Position Right $P_R$			
$X = (P_R + P_L)/2$			
$\Phi = \text{TAN}^{-1} X/L$ (Degrees)			
$\text{SIN } \Phi$			
$\lambda = d \text{ SIN } \Phi$			
% error = $\{(\lambda - \lambda_s) / \lambda_s\} \times 100$			

CIL03/20/99 HAC 21 October 2012