

WORCESTER POLYTECHNIC INSTITUTE

MECHANICAL ENGINEERING DEPARTMENT

HOMEWORK – CHAPTER 02

COURSE No.: ME-593N, Fall 2000
COURSE NAME: Laser Metrology and Nondestructive Testing (NDT)
<http://www.wpi.edu/~cfurlong/ME-593N>
DATE: 13 September 2000
DUE: 21 September 2000

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NOTE: In all solutions, state explicitly every assumption and/or approximation made, explain every procedure, and justify its use. Dimensional analyses are absolutely necessary. All results must be expressed in appropriate units. PLEASE, ALWAYS SHOW ALL WORK, while writing your results only on one side of the sheet(s) of paper; start each problem on a new sheet. *Attach this sheet to your solution. Show your work using a clear and professional style.*

PROBLEM 2.1. Based on the possible applications of optical metrology techniques in your research investigations, as identified in the previous assignment, write *two* abstracts. These abstracts will be revised and one of them expanded and used as the *Project Proposal* for this course.

READING 2.1. Chapters 4 and 5 (handouts) from: E. Hecht, *Optics*, Addison-Wesley Publishing, Reading, Massachusetts, 1990.