

## LECTURE 3 WAVELIKE PROPERTIES OF RADIATION

### I. Wave Nature of Radiation

- A. Light: periodic variation of an electromagnetic field
- B. Electromagnetic radiation
  - 1. Period
  - 2. Frequency
  - 3. Speed

### II. Wave Nature of Light

- A. Superposition
- B. Constructive and destructive interference

### III. Wavelike Properties of Radiation

- A. Young's two slit experiment
- B. General condition for constructive interference
- C. General condition for destructive interference