# Wave Optics Topic Tree

Based on the contents of the Wave Optics textbook you uploaded, here is the topic tree for Chapter 10 - Wave Optics:

## Chapter 10: Wave Optics

1. **Introduction**
    - Descartes' corpuscular model of light
    - Huygens' wave theory of light
    - Experiments confirming the wave model
    - Maxwell's electromagnetic theory of light

2. **Huygens Principle**
    - Definition of wavefront
    - Propagation of wavefront
    - Laws of reflection and refraction based on Huygens principle

3. **The Principle of Superposition of Waves**
    - Interference of light
    - Young's Double Slit Experiment
    - Constructive and Destructive Interference

4. **Interference of Light**
    - Conditions for sustained interference
    - Coherent sources of light
    - Applications of interference

5. **Diffraction**
    - Huygens-Fresnel principle
    - Single-slit diffraction
    - Diffraction and wavefront bending
    - Resolving power of optical instruments

6. **Polarisation**
    - Transverse nature of light waves
    - Polarisation by reflection and refraction
    - Polarising filters and applications