

# **Physics 2C: Fluids, Waves, Thermodynamics, and Optics**

## **Week 1: Fluids**

MAGDEBURG SPHERE  
EQUILIBRIUM TUBES  
VENTURI TUBE  
CARTESIAN DIVER  
RULER LIFT  
FLOATING BALL  
CRUSH THE CAN

## **Week 2: Temperature**

BALL AND RING  
BIMETALLIC STRIP  
SPECIFIC HEAT

## **Week 3: Kinetic Theory**

VIDEO: TEMPERATURE AND KINETIC THEORY  
THERMOELECTRIC CONVERTER  
RADIOMETER  
BOYLE'S LAW

## **Week 4: Entropy and the Second Law**

STEAM ENGINE  
STIRLING ENGINE  
PVT MODELS

## **Week 5: Waves**

VERY LONG SPRING  
WAVE MACHINE  
SONOMETER  
CHLANDI PLATES

## **Week 6: Waves**

TUNING FORKS  
DB METER  
ACOUSTIC INTERFERENCE  
ACOUSTIC BEATS  
RIPPLE TANK  
DOPPLER EFFECT  
INTERFERENCE PLATES  
FOURIER SYNTHESIZER  
HOOT TUBE

**Week 7: Electromagnetic Waves**

JACOB'S LADDER  
POLAROIDS  
MICROWAVE OPTICS  
PHOTOELASTIC STRESS  
LIGHT PIPE  
BLACKBOARD OPTICS

**Week 8: Images**

LIGHT PIPE  
REFLECTION/REFRACTION TANK  
BLACKBOARD OPTICS  
MIRAGE  
LIGHTBULB IMAGE

**Week 9: Interference**

RIPPLE TANK  
LASER INTERFERENCE  
NEWTON'S RINGS

**Week 10: Diffraction**

SPECTRUM TUBE WITH DIFFRACTION GRATING  
LASER DIFFRACTION