THE LIGHT MICROSCOPE
- Standard applications of light microscopy
  - Low power objective
  - High power objective
  - Immersion objective
- Important considerations
- Bright-field and dark-field illumination
- Fluorescence microscopy
- Confocal laser scanning microscopy

MORPHOLOGICAL INVESTIGATIONS
- Microscopic ‘identification’ of filamentous microorganisms
- ‘Identification’ of protozoa and metazoa

EXAMINING ACTIVATED SLUDGE SAMPLES MICROSCOPICALLY
- Mounting the activated sludge sample
- Gram staining
- Neisser staining
- DAPI staining
- CTC staining

FLUORESCENCE in situ HYBRIDIZATION
- Reagents and solutions for FISH
- Procedure

COMBINED STAINING TECHNIQUES
- FISH-DAPI staining
- FISH-PHA staining