## المحتوى العلمي للمقرر:

- Polymers
- Basic concept, classification and structural properties
- Synthesis techniques
- Additives
- Introduction to Formulation chemistry
- Soups and detergents
- Soups: raw material, chemistry, classification,
- Manufacturing, environmental aspects
- Detergents: principle group of detergent, inorganic builder
- Manufacturing of detergents, environmental aspect
- Pharmaceutical industry
- Introduction, classical chemistry of pharm. product
- Industrial process in pharm. Industry Manufacture
- Quality control
- Paints
- Introduction, constituent of paints, paints formulation, paint manufacture, application and cause paint failure,
- Testing and quality control
- Environmental impact and risks

## الكتب الأساسية:

Textbook of Polymer Science, Billmeyer, 1990, John Wiley & Sons.

## لمرجع المساند:

Polymorphism in Molecular Crystals (International Union of Crystallography) by Joel Bernstein, 2008.