

**Course Title:** Organic Chemistry Laboratory

**Prerequisite:** Engineering Organic chemistry

**Number of Credits:** 1

**Lecturer:** Mrs. Moghadasian

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**Course Topics:**

- Introduction to the safety items, laboratory regulations and the procedure during academic semester, simple distillation and determining boiling temperature of liquids.
  - Determining melting temperature of pure organic combinations and study of impure effect on melting temperature.
  - Fractional distillation
  - Water vapor distillation (direct and indirect methods)
  - Mono – solvent crystallization
  - Synthesis of Acetanilide and Sublimation
  - Recognizing organic combinations (element analysis)
  - Synthesis of Orange 2 coloring agents
  - Extraction from solids
  - Extraction from liquids
  - Column chromatography
  - Preparation of soap
  - Paper chromatography
  - Dual -solvent crystallization
  - Methyl orange synthesis
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**Reading Resources:**

- Practical organic chemistry
- Modern experimental organic chemistry 1& 2
- Organic chemistry laboratory agenda
- Completed textile products
- Synthesis of organic materials
- Organic chemistry laboratory