

**Organic Chemistry II**  
**Level: 2<sup>nd</sup> Class, 1<sup>st</sup> Semester**  
**Credit hours: 1**

Reference text: *Lab Manual for Organic Chemistry Adopted by the Department.*

No	Lecture Title	Hour(s)
1	Determination of melting point (Known sample).	2
2	Determination of melting point (quiz and unknown).	2
3	Determination of boiling point (known sample).	2
4	Determination of boiling point (quiz and unknown).	2
5	Elemental analysis (explanation of basic concepts).	2
6	Elemental analysis (known quantity and quality sample).	2
7	Solution and filtration techniques (explanation of basic concepts).	2
8	Re-crystallization (known sample).	2
9	Re-crystallization (quiz and unknown sample).	2
10	Extraction technique (known sample).	2
11	Extraction technique (quiz and unknown).	2
12	Distillation techniques (known samples).	2
13	Distillation techniques (quiz and unknown).	2
14	Sublimation technique (known sample).	2
15	Sublimation technique (quiz and unknown).	2

**Practical Organic Chemistry III**  
**Level: 2<sup>nd</sup> Class, 2<sup>nd</sup> Semester**  
**Credit hours/week : 1**

*the Reference text: Lab Hand book for practical Org Chem adopted by department*

No	Lecture Title	Hour(s)

1	Determination of solubility class (known sample)	2
2	Determination of solubility class (quiz and unknown)	2
3	Identification of alcohols (known sample, quiz and unknown).	2
4	Identification of phenols (known samples)	2
5	Identification of phenols (quiz and unknown).	2
6	Identification of aldehydes and ketons (explanation of concepts and quiz).	2
7	Identification of aldehydes and Ketons (known sample).	2
8	Identification of aldehydes and Ketons (quiz and unknown).	2
9	Identification of carboxylic acid (explanation of concepts)	2
10	Identification of carboxylic acid (known sample).	2
11	Identification of carboxylic acid (quiz and unknown).	2
12	Salts of carboxylic acids (known sample).	2
13	Salts of carboxylic acids (quiz and unknown).	2
14	Classification of reactions of amines (known sample).	2
15	Classification of reactions of amines (quiz and unknown)	2

### Practical Organic Pharmaceutical Chemistry II

Level: 4<sup>th</sup> Class, 1<sup>st</sup> Semester

Credit hours/week : 1

Reference text: *Lab Handbook for Practical Pharmaceutical Chemistry*

*Adopted by the Department*

No	Lecture Title	Hour(s)
1	Preparation of salicylic acid.	2
2	Re-crystallization of salicylic acid.	2

3	Synthesis of aspirin.	2
4	Re-crystallization of aspirin.	2
5	Assay of aspirin (known sample).	2
6	Assay of aspirin (unknown sample).	2
7	Preparation of nitrobenzene.	2
8	Preparation of aniline.	2
9	Preparation of acetanilide.	2
10	Re-crystallization of acetanilide.	2
11	Chlorosulfonation of acetanilide.	2
12	Amination of <i>p</i> -chlorobenzene sulfonyl chloride.	2
13	Hydrolysis of <i>p</i> -chlorobenzene sulfonyl chloride to sulfanilamide.	2
14	Assay of sulfa drugs (known sample).	2
15	Assay of sulfa drugs (unknown sample).	2