**III.2.2 BASIC PHARMACEUTICS**

1. **Course description:**
2. **Credit points**: 3 ECTS
3. **Time commitment:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Items | Lecture | Tutorial/  Exercise | Practice/  Assignment | Lab-work | **Total** |
| No. of hours | 30 |  |  | 10 | **40** |

1. **Prerequisites**: N/A
2. **Recommended background knowledge**: Pharmacology, Chemistry and physic-chemistry.
3. **Subject description:**

Basic knowledge about bioavailability as well as formulation design, preparation and evaluation of oral dosage forms including liquid, semisolid and solid drug deliveries..

1. **Objectives & Outcome**

Formulation of a dosage form: major excipients and their effects in formulations.

Preparation process

1. **Assessment/ Evaluation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Component | Attendance | Exercises | Assignments | Practical | Midterm | Final |
| Percentage % |  |  |  | 20 | 20 | 60 |

1. **Prescribed Textbook(s)**

[1] Handouts

[2] Handbook of Pharmaceutical Manufacturing Formulations vol 1 (Compressed Solid Products), vol 2 (uncompressed solid products), vol 3 (liquid products).

**II. Course content & schedule:**

[1] Topic 1: Bioavailability and bioequivalence studies for Orally administered drug formulations

[2] Topic 2: Formulations design and preparations methods of solid dosage forms

2.1. Tablets

[2] Topic 2: Formulations design and preparation methods of solid dosage forms

2.1. Tablets (cont.)

[2] Topic 2: Formulations design and preparation methods of solid dosage forms

2.1. Tablets (cont.)

[2] Topic 2: Formulations design and preparation methods of solid dosage forms

2.2. Powder

2.3. Granules

[2] Topic 2: Formulations design and preparation methods of solid dosage forms

2.4. Hard capsules

2.5. Film coating

[2] Topic 2: Formulations design and preparation methods of solid dosage forms

2.5. Film coating (cont.)

[3] Topic 3: Formulations design and preparation methods of liquid and semisolid dosage forms

3.1. Solutions

[3] Topic 3: Formulations design and preparation methods of liquid and semisolid dosage forms

3.1. Solutions (cont.)

3.2. Syrup

[3] Topic 3: Formulations design and preparation methods of liquid and semisolid dosage forms

3.3. Suspension

**III. Reference Literature:**

|  |
| --- |
| None |