**1st Tutorial Topics:**

**Different pharmaceutical dosage forms and routes of administration:** this will include

* Why we use different dosage forms and routes of administration.
* Different types of dosage forms.
* Routes of administration and their advantages and disadvantages .

**Receptors:** this will include

* -different type of receptors
* -Examples of drugs target each receptor
* -Receptor structure & Function

**Ion channels:** this will include

* -Different types of ion channels
* -Examples of drugs target ion channels
* -Structure and Function of ion channels

**Adrenergic receptors:** this will include

* -Classification of adrenergic receptors
* -Expression of adrenergic receptors
* -Pharmacological action
* -Examples of adrenergic agonists & antagonists

**G-protein:** this will include

* -Type of G-protein
* -Function of G-protein
* -Intracellular second messengers.

**2nd Tutorial Topics:**

* Cotransmissin in autonomic nervous system
* Muscarinic receptors
* Nicotinic receptors
* Treatment of glaucoma
* Skeletal muscle relaxants

Each group is asked to conduct an 8-12 min. - long slide presentation about one of the above topics in addition to oral discussion about the corresponding topic.

Each group is inquired to submit an electronic copy of their presentation.

**PHL 313 lab tutorials**