1. Text book (Annunziato, Di Renzo: Gnocchi editrice; Rang e Dale: Elsevier)
2. PDF of lectures: available before lectures
3. Integrative activities : Seminars
4. for information: morelli@unica.it

1. Exams: oral discussion
2. Midterm exams: end october, end november, mid january

Link for PDF of lessons

https://unica.it/unica/page/it/micaela_morelli_mat_materiale_didattico_farmacoterapia_it_1

1. Pathology, disease origin and DSM
2. Drugs
3. Side effects
4. Drug interactions

Main class of diseases and investments for the research on new drugs

Class of diseases	Total investment (%)
Central nervous system (anxiolytics, neurodegenerative diseases, psychosis, depression)	**23**
Tumors	**21**
Cardiovascular system (hypertension, heart attack, stroke)	**15**
Infections (virus, bacteria)	**14**
Respiratory system (allergies, asthma)	**7**
Digestive and excretory system	**3**
Other (dermatology, osteoporosis, abortive, sexual dysfunction, hypoglycemic agents)	**17**

1. General pharmacology (pharmacokinetics, pharmacodynamics, molecular)
2. Pharmacotherapy (systems pharmacology, drug interactions, adverse effects)
3. Clinical pharmacology (clinical therapy, pharmacovigilance, pharmacoepidemiology, pharmacoeconomics)
4. Toxicology
5. Chemotherapy

Pharmacogenomics:

Targeted to hereditary diseases of which the gene is known (eg hemophilia, Huntington's disease), or in which a hereditary component is present and in which more genes may be involved, diseases characterized by genetic alteration (bipolar disorder, tumors)

Pharmacogenetic:

It can be considered a branch of pharmacogenomics.

Study associations between genetic characteristics individual and drug response

Investigate the causes of the limited efficacy of a drug or the presence of adverse reactions as a function of individual genetic variability

Gene metabolism (cytochromes, conjugation enzymes)

Action mechanism genes (receptors, transporters)