

Gandaki University
Gandaki Province, Pokhara, Nepal

Title: Syllabus

Subject: Pharmacy

Faculty: Faculty of Pharmacy

Post: Associate Professor/Reader

The syllabus covers the general topics of major subjects taught in pharmacy. The weightage of each topic is different.

Basic Science- *weightage- Low*

Basics of anatomy, physiology, biochemistry, carbohydrates, amino acids, lipids, metabolites, Enzyme and their activity

Pharmaceutics- *weightage- Moderate*

Fundamental of pharmacy, Pharmaceutical calculation, Formulation (drug dosage form) and manufacturing of pharmaceutical products, Pharmacopoeia, Physical pharmacy, Biopharmaceutics, Quality assurance

Pharmacology and Toxicology- *weightage- Moderate*

Pharmacokinetics, ADME, Pharmacotherapeutics, Adverse drug reaction, Drug interactions, Antidotes

Pharmaceutical Chemistry- *weightage- Moderate*

Fundamental of chemistry, Instrumental analysis and quality control, Structural activity relationship

Pharmacognosy- *weightage- Moderate*

Phytochemistry, Himalayan medicinal plants, Standardization of herbal drugs, Phytopharmacology, Plant-based functional foods

Pharmacy Practice -*weightage- Moderate*

Drug distribution system in hospitals, Community pharmacy, Rational use of the drug, Evidence-based medicine, Clinical management of ADRs, Hospital formulary, TDM, Patient counseling, Medication error and adherence

Research Methodology and Statistics- *weightage - High*

Study design and methodology, Sampling techniques, Measure of central tendency, Probability, Significance test, Univariate and multivariate analysis; data design drug design and discovery

Pharmaceutical Jurisprudence- *weightage- Low*

Regulatory agencies and affairs, Act and regulations of Nepal- Drug act, NPC act, Drug development process; Intellectual Property Right in modern and traditional drug practice

Pharmaceutical Microbiology and Biotechnology *weightage- weightage- Low*

Microbial taxonomy, DNA, RNA, Proteins, Transcription, Translation, Genetically modified organisms, Biotherapeutics, Recombinant DNA technology

Big data and statistics- *weightage-Moderate*

Issues of ethics- usage and administration- *weightage-Moderate*