

PhD Course work Syllabus for Dravyaguna Vigyan

1 - NAMARUPA VIGYANA

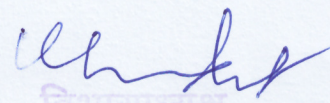
- Importance of Namagyana of Dravya, origin of Namarupagyana of Aushadhi in Veda, etymological derivation of various names and synonyms of Aushadhi.
- Rupagyana in relation to Aushadhi. Sthula and Sukshma description (Macroscopic and Microscopic study) of different parts of the plant.
- Synonyms of dravyas(aushadha and Ahara) mentioned in Vedic compendia, Brihatrayee, Bhavaprakasha and Rajanighantu. Basonyms, synonyms and distinguish morphological characteristic features of medicinal plants listed in Ayurvedic Pharmacopoeia of India(API).
- Knowledge of Anukta dravya (Extra pharmacopeial drugs) with regards to namarupa. Sandigdha dravya (Controversial drugs) vinischaya.
- Knowledge of biodiversity, endangered medicinal species.
- Knowledge of TKDL, Introduction to relevant portions of Drugs and cosmetic act, Magic remedies Act, Intellectual Property Right (IPR) and Regulations pertaining to Import and Export of Ayurvedic drugs. Knowledge of tissue culture techniques.
- Knowledge of Genetically Modified Plants.
- Essential of pharmacognosy, Identification of Aushadha Dravya (drugs substances) as described in classical texts of Ayurveda. International Code of Botanical Nomenclature (ICBN) and the International Code of Nomenclature for Cultivated Plants (ICNCP), Key Identifying characters and family of species of medicinal plants used in ayurveda with example.

2- GUNA KARMA VIGYAN

- Fundamental principles of drug action in Ayurveda and conventional medicine.
- Detailed study of rasa-guna- virya- vipaka -prabhava and karma with their applied aspects and commentators (Chakrapanidatta, Dalhana, Arunadatta, Hemadri and Indu) views on them.
- Comprehensive study of karma as defined in Brihatrayee & Laghutrayee.
- Detailed study of Guna and Karma of dravyas listed in API and Bhavaprakasha Nighantu along with current research review.
- Detailed study of aharadravya/ ahara varga ascribed in Brihatrayee and various nighantus.

3- PRAYOGAVIGYANA

- Bhaishjya Prayog Siddhant [Principles of drug administration] - Bhaishajya Marga (routes drug administration), Vividha Kalpana (Dosage forms).
- Principles of Yoga Vigyan(of compounding), Matra (Dosage), Anupana (Vehicle), Aushadha grahankal (Time of drug administration), Sevankal avadhi (duration of drug administration), Pathyapathya (Do/Don't) /Contraindications), complete Prescription writing (Samagra Vyavastha patra). Samyoga- Viruddh Sidhanta and its importance.
- Amayika prayoga (therapeutic uses) of important plants described in Brihatrayee, Chakradutta, Yoga ratnakara and Bhavaprakasha.



विभागाध्यक्ष

द्रव्यगुण विज्ञान विभाग

युनिवर्सिटी कॉलेज ऑफ आयुर्वेद

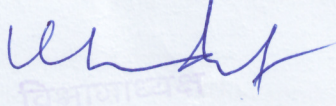
डॉ. सर्वपल्ली राधाकृष्णन् स्मृति स्नातकोत्तर विभागाध्यक्ष, चोमपुर

4-NIGHANTU & YOGA VIGYANA

- Etymology of nighantu, their relevance, utility and salient features.
- Chronological history of the ancient, medieval and recent Nighantus with their authors name, period and Content
- Detailed study Aushadha Kalpana mentioned in Sharangadhara samhita and Ayurvedic Formulary of India (AFI). General awareness on poshaka ahara (Nutraceuticals), Varnya (cosmoceuticals), food additives, Excipients etc.
- Knowledge of plant extracts, colors, flavors and preservatives.
- Review of important modern works on classical medicinal plants published by Govt of India, department of AYUSH and ICMR.

5- MODERN PHARMACOLOGY

- Pharmacological principles and knowledge on drugs acting on various systems.
- Basic knowledge of experimental pharmacology for the evaluation of - analgesic, antipyretic, anti-inflammatory, anti-diabetic, anti- hypertensive, hypo lipidemic, anti-ulcer, cardio protective, hepatoprotective, diuretics, adaptogens, CNS activities.
- Knowledge of Heavy metal analysis, pesticidal residue and aflatoxins.
- Knowledge of evaluation of anti-microbial and antimycotic activities.
- Knowledge of Pharmaco-vigilance, definition, Implementation, Pharmacovigilance centers, Adverse Drug Reaction, Adverse Drug Event, Side effects, How to report ADR Ayurvedic concept of Pharmacovigilance, Benefits and difficulties of implementation of Pharmacovigilance of Ayurvedic drugs, Role of Pharmacovigilance centers in educating general public regarding expected side effects of Ayurvedic drugs.
- Knowledge of clinical pharmacology
- New drug development methodology and guidelines
- Knowledge of Pharmacogenomics.


विभागाध्यक्ष
द्रव्यगुण विज्ञान विभाग
युनिवर्सिटी कॉलेज ऑफ आयुर्वेद
डॉ. सर्वपल्ली राधाकृष्णन् राजस्थान आयुर्वेद विश्वविद्यालय, जोधपुर