

1.3.1 The Institution integrates cross-cutting issues relevant to gender, environment and sustainability, human values, health determinants, Right to Health and emerging demographic issues and Professional Ethics into the Curriculum as prescribed by the University/respective regulative councils

List of courses with their description

Dhanvantari Homoeopathic Medical College And Hospital & Research Centre, Nashik

1.3.1 List of courses with their description.

Issues identified	Course	Apropos
Gender Equality	BHMS	 Gender and Social Equality is nurtured in the students by Seminan by guest. we appointed Dr.Hari Mandore as a councilor. Various events of College, cultural program, sports events. Vishakha committee is implemented to resolve any issues related to females, staff and
Environment & Sustainability	BHMS (Community Medicine	students. As a responsible citizen we must consider about the ill effects of environment degradation.
		 The syllabus of Community medicine which includes study of Human diseases in relation with the Environmental issues. Benefits of sustainability are percolated to student by programs like field visits.
		 To Dairy farm,



	• Tree plantation,
	• Swachataabhiyaan, ,
	 Herbal garden is maintained by department of pharmacy Under NSS activities students are being educated about the Ecosystem preservation
BHMS	
	• Human values are being taught by seminar conducted by the institute.
	 Also philosophical learning of Organon of Medicine.
	 NSS activities are to b conducted.
BHMS (Forensic Medicine)	 Students are trained in professional ethical standards IInd year students are taught medical j jurisprudence
	 In III and IV year there soft skills are developed on in internship they are actually practicing ethics standards reflected in patients case taking. Students are exposed to the legal proceeding by visiting the Court Code of



		, professional ethics a being made aware an taught to the students
Health Determinants	BHMS (Community Medicine)	 Students are being take care regarding their
		 medical issues CBC test are done of students e Campus of college is healthy cleanliness is taken care. Green campus is
		 maintained o Students ate encouraged for tree plantations. Swatchata abhiyan under students are



Right to Health	BHMS (Community Medicine)	• . Medical leave are granted to staff an students of college
		 Laboratory investigations are done.
		 Clean and safe drinking water facility is made available in campus
		• Treatment of ill students and staff is promptly done
Emerging Demographic issues	BHMS (Community Medicine)	 In NSS activities students are being taught about conserving the natural resources
		• Occupational related hazards are being is also educated to students.
		• Cultural impact on community is experienced by students under NSS activities



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Cross cutting issues into the curriculum

DHANVANTARI HOMOEOPATHIC MEDICAL COLLEGE AND HOSPITAL & RESEARCH CENTRE, NASHIK

1.3.1 List of the courses that addresses the various cross cutting issues in to the curriculum.

Sr. N o.	Course name / course code	Gender	Environment & Sustainability	Human values	Health Determi nants	Rights to Health	Emerging Demograp hic Issues	Profess ional ethics	Details
1	Anatomy DAB01NNN101	1					T.		Volume 2 chapter no 17,31
2	Physiology DAB01NNNN102	5							Chapter no 74,78
3	Pharmacy DAB01NNNN103								
4	HMM HomUG-HMM-I								
5	Organon HomUG-OM-I								
6	Pathology DAB012015201								
7	FMT DAB012015202	1		1				1	Chapter no 9,11,2
8	HMM DAB012015203								
9	Organon DAB012015204								
10	Surgery DAB01201530 1								
11	OBGY DAB012015302	1							Chapter no 1
12	HMM DAB012015203								

13	Organon DAB012015204							
14	Medicine DAB012015401							
15	Community medicine DAB012015405	1	1	1	1	1	1	Chapter no 2,9,11,13
16	Repertory DAB012015404							
17	HMM DAB012015203							
18	Organon DAB012015204							



PRINCIPAL Dhanvantari Homoeopathic Medical College and Hospital & Research Centro, Nashik



SYLLABUS FOR FIRST B.H.M.S. (DEGREE) COURSE (2015)

As per the Homoeopathy (DEGREE Course) BHMS regulation, 1983, (as amended up to 2019) <u>ANATOMY</u>

A. Theory:

(a) A complete course of human anatomy with general working knowledge of different anatomical parts of the body.

The curriculum includes the following, namely: -

1. General Anatomy:

Modern concepts of cell and its components; cell division, types with their significance.

Tissues.

Genetics.

2. Developmental anatomy (Embryology):

Spermatogenesis

Oogenesis

Formation of germ layers

Development of embryogenic disk

Placenta

Development of abdominal organs

Development of cardio vascular system

Development of nervous system

Development of respiratory system

Development of body cavities

Development of uro-genital system

3. Regional anatomy:

This will be taught under the following regions: -

Head, Neck and Face, Brain

Thorax

Abdomen

Upper and Lower Extremities

3.5 Special Senses

Each of the above areas will cover, -

(a) osteology

- 4. Regulation of respiration
- 5. Pulmonary function tests
- 6. High altitude and space physiology
- 7. Deep sea physiology
- 8. Artificial respiration
- 9. Effects of exercise on respiration
- V. Digestive system:
 - 1. Introduction to digestive system
 - 2. Composition and functions of digestive juices
 - Physiological anatomy of Stomach, Pancreas, Liver and Gall bladder, Small intestine, Large intestine
 - 4. Movements of gastrointestinal tract
 - 5. Gastrointestinal hormones
 - 6. Digestion and absorption of carbohydrates, proteins and lipids
- VI. Renal physiology and skin:
 - 1. Physiological anatomy of kidneys and urinary tract
 - 2. Renal circulation
 - Urine formation: Renal clearance, glomerular filtration, tubular reabsorption, selective secretion, concentration of urine, acidification of urine
 - 4. Renal functions tests
 - 5. Micturition
 - 6. Skin
 - 7. Sweat
 - 8. Body temperature and its regulation
- VII. Endocrinology:
 - 1. Introduction of endocrinology
 - 2. Hormones and hypothalamo-hypophyseal axis
 - 3. Pituitary gland
 - 4. Thyroid gland
 - 5. Parathyroid
 - 6. Endocrine functions of pancreas
 - 7. Adrenal cortex
 - 8. Adrenal medulla
 - 9. Endocrine functions of other organs

VIII. Reproductive system:

1. Male reproductive system-testis and its hormones; seminal vesicles,

prostategland, semen.

- 2. Introduction to female reproductive system
- 3. Menstrual cycle
- 4. Ovulation
- 5. Menopause
- 6. Infertility
- 7. Pregnancy and parturition
- 8. Placenta
- 9. Pregnancy tests
- 10. Mammary glands and lactation
- 11. Fertility
- 12. Foetal circulation
- IX. Central nervous
 - system:
 - 1. Introduction to nervous system
 - 2. Neuron
 - 3. Neuroglia
 - 4. Receptors
 - 5. Synapse
 - 6. Neurotransmitters
 - 7. Reflex
 - 8. Spinal cord
 - 9. Somato-sensory system and somato-motor system
 - 10. Physiology of pain
 - 11. Brainstem, Vestibular apparatus
 - 12. Cerebral cortex
 - 13. Thalamus
 - 14. Hypothalamus
 - 15. Internal Capsule
 - 16. Basal ganglia
 - 17. Limbic system
 - 18. Cerebellum Posture and equilibrium
 - 19. Reticular formation
 - 20. Proprioceptors
 - 21. Higher intellectual function
 - 22. Electroencephalogram (EEG)
 - 23. Physiology of sleep
 - 24. Cerebro-spinal fluid (CSF)

- 4. Estimation of Haemoglobin Concentration
- 5. Determination of Haematocrit
- 6. Haemocytometry
- 7. Total RBC count
- 8. Determination of RBC indices
- 9. Total Leucocytes Count (TLC)
- 10. Preparation and examination of Blood Smear
- 11. Differential Leucocyte Count (DLC)
- 12. Absolute Eosinophil Count
- 13. Determination of Erythrocyte Sedimentation Rate
- 14. Determination of Blood Groups
- 15. Osmotic fragility of Red cells
- 16. Determination of Bleeding Time and Coagulation Time
- 17. Platelet Count
- 18. Reticulocyte Count

II. Human experiments:

- 1. General Examination
- 2. Respiratory System- Clinical examination, Spirometry, Stethography
- 3. Gastrointestinal System- Clinical examination
- 4. Cardiovascular System- Blood pressure recording, Radial pulse, ECG, Clinicalexamination
- 5. Nerve and Musle Physiology-Mosso's Ergography, Handgrip Dynamometer
- 6. Nervous System- Clinical examination
- 7. Special Senses- Clinical examination
- 8. Reproductive System- Diagnosis of pregnancy

BIO- CHEMISTRY

A. THEORY:

- Carbohydrates: (Chemistry, Metabolism, Glycolysis, TCA, HMP, Glycogen synthesis and degradation, Blood glucose regulation)
- 2. Lipids: (Chemistry, Metabolism, Intestinal uptake, Fat transport, Utilisation of stored fat, Activation of fatty acids, Beta oxidation and synthesis of fatty acids)
- Proteins: (Chemistry, Metabolism, Digestion of protein, Transamination, Deamination Fate of Ammonia, Urea cycle, End products of each amino acid and their entry into TCA cycle

FORENSIC MEDICINE AND TOXICOLOGY

- I. Forensic Medicine
- A. Theory:

1. Introduction

- (a) Definition of forensic medicine.
- (b) History of forensic medicine in India.
- (c) Medical ethics and etiquette.
- (d) Duties of registered medical practitioner in medico-legal cases.

2. Legal procedure

- (a) Inquests, courts of India, legal procedure.
- (b) Medical evidences in courts, dying declaration, dying deposition, including medical certificates, and medico-legal reports.

3. Personal identification

- (a) Determination of age and sex in living and dead; race, religion.
- (b) Dactylography, DNA finger printing, foot print.
- (c) Medico-legal importance of bones, scars and teeth, tattoo marks, handwriting, anthropometry.
- (d) Examination of biological stains and hair.

4. Death and its medico-legal importance

- (a) Death and its types, their medico-legal importance
- (b) Signs of death (1) immediate, (2) early, (3) late and their medico-legal importance
- (c) Asphyxial death (mechanical asphyxia and drowning).
- (d) Deaths from starvation, cold and heat etc.

5. Injury and its medico-legal importance

Mechanical, thermal, firearm, regional, transportation and traffic injuries; injuries from radiation, electrocution and lightening.

6. Forensic psychiatry

- Definition; delusion, delirium, illusion, hallucinations; impulse and mania; classification of Insanity.
- (b) Development of insanity, diagnosis, admission to mental asylum.

7. Post-mortem examination (autopsy)

- (a) Purpose, procedure, legal bindings; difference between pathological and medicolegal autopsies.
- (b) External examination, internal examination of adult, foetus and skeletal remains.

8. Impotence and sterility

Impotence; Sterility; Sterilization; Artificial Insemination; Test Tube Baby; Surrogate mother.

9. Virginity, defloration; pregnancy and delivery.

10. Abortion and infanticide

- (a) Abortion: different methods, complications, accidents following criminal abortion, MTP.
- (b) Infant death, legal definition, battered baby syndrome, cot death, legitimacy.

11. Sexual Offences

Rape, incest, sodomy, sadism, masochism, tribadism, bestiality, buccal coitus and other sexual perversions.

II. Toxicology

1. General Toxiocology

- (a) Forensic Toxicology and Poisons
- (b) Diagonsis of poisoning in living and dead,
- (c) General principles of management of poisoning,
- (d) Medico –legal aspects of poisons,
- (e) Antidotes and types.

2. Clinical toxicology

- (a) Types of Poisons:
 - (i) Corrosive poisons (Mineral acids, Caustic alkalis, Organic acids, Vegetable acids)
 - (ii) Irritant poisons (organic poisons Vegetable and animal; Inorganic poisons
 metallic and non-metallic; Mechanical poisons)
 - (iii) Asphyxiant poisons (Carbon monoxide; Carbon dioxide; Hydrogen sulphide and some war gases)
 - (iv) Neurotic poisons (Opium, Nux vomica, Alcohol, Fuels like kerosene and petroleum products, Cannabis indica, Dhatura, Anaesthetics Sedatives and Hypnotics, Agrochemical compounds, Belladonna, Hyoscyamus, Curare, Conium)
 - (v) Cardiac poisons (Digitalis purpurea, Oleander, Aconite, Nicotine)

2. Certificate Writing:

Various certificates like sickness certificate, physical fitness certificate, birth certificate, death certificate, injury certificate, rape certificate, chemical analyzer (Regional Forensic Laboratory), certificate for alcohol consumption, writing post-mortem examination report.

C. Examination:

1. Theory:

Number of papers-01 Marks: 100

Forensic Medicine:	50 marks
Toxicology:	50 marks

2. Practical including viva voce or oral:

Total

Marks: 100	
Distribution of marks:	Marks
2.2.1. Spotting	40
2.2.3. Journal or practical records	10
2.2.4. Viva voce (oral)	50

<u>100</u>

GYNAECOLOGY AND OBSTETRICS

A. Theory:

1. Gynaecology

- (a) Infections and ulcerations of the female genital organs.
- (b) Injuries of the genital tract.
- (c) Disorders of menstruation.
- (d) Menorrhagia and dysfunctional uterine bleeding.
- (e) Disorders of female genital tract.
- (f) Diseases of breasts
- (g) Sexually transmitted diseases
- (h) Endometriosis and adenomyosis.
- (i) Infertility and sterility
- (j) Non-malignant growths.
- (k) Malignancy
- (l) Chemotherapy caused complications
- (m) Management and therapeutics of the above listed topics in Gynaecology.

2. Obstetrics

- (a) High risk labour; mal-positions and mal-presentations; twins, prolapse of cord and limbs, abnormalities in the action of the uterus; and abnormal conditions of soft part contracted pelvis; obstructed labour, complications of 3rd stage of labour, injuries of birth canal, foetal anomalies.
- (b) Abnormal pregnancies-abortions, molar pregnancy, diseases of placenta and membranes, toxemia of pregnancy, antepartum haemorrhages, multiple pregnancy, protracted gestation, ectopic pregnancy, intrauterine growth retardation, pregnancy in Rh negative woman, intrauterine fetal death, still birth.
- (c) Common disorders and systemic diseases associated with pregnancy.
- (d) Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994.
- (e) Common obstetrical operations-medical termination of pregnancy, criminal abortion, caseareran section, episiotomy.
- (f) Emergency obstetric care.

COMMUNITY MEDICINE

A. Theory:

1. Epidemiology

- (a) Principles and methods of epidemiology
- (b) Epidemiology of communicable diseases:
 - General principles of prevention and control of communicable diseases;
- (c) Communicable diseases: their description, mode of spread and method of prevention.
- Protozoan and helminthic infections- Life cycle of protozoa and helminthes, their prevention.
- (e) Epidemiology of non-communicable diseases: general principles of prevention and control of non-communicable diseases
- (f) Screening of diseases

2. Bio-statistics

- (a) Need of biostatistics in medicine
- (b) Elementary statistical methods
- (c) Sample size calculation
- (d) Sampling methods
- (e) Test of significance
- (f) Presentation of data
- (g) Vital statistics
- Demography and Family Planning; Population control; contraceptive practices; National Family Planning Programme.
- 4. Health education and health communication
- **5.** Health care of community.
- 6. International Health
- 7. Mental Health
- 8. Maternal and Child Health
- 9. School Health Services
- 10. National Health Programs of India including Rashtriya Bal Chikitsa Karyakram.
- 11. Hospital waste management
- 12. Disaster management
- Study of aphorisms of organon of medicine and other homoeopathic literatures, relevant to above topics including prophylaxis.

B. Practicals:

- **1.** Food additives; food fortification, food adulteration; food toxicants
- 2. Balanced diet
- 3. Survey of nutritional status of school children, pollution and Water purification
- 4. Medical entomology
- 5. Family planning and contraception
- 6. Demography
- 7. Disinfection
- 8. Insecticides

Field Visits

- 1. Milk dairy
- 2. Primary Health Centre
- 3. Infectious Diseases Hospital
- 4. Industrial unit
- 5. Sewage treatment plant
- 6. Water purification plant