

DEPARTMENT OF ANATOMY

Title	Value Added Course in Course in Basics of medical genetics
Target group	UG / Interns / PG students of Medical course at RRMCH
Goal & Objective of the Course	<ol style="list-style-type: none"> 1. Goals: To enhance the understanding of genetic diseases, discuss disease management options and explain the risks and benefits of genetic testing. 2. Aims: (1) enhancing accuracy of risk perceptions (2) promoting health-enhancing behavior (3) facilitating adaptation to genetic risk (4) detecting disease early and/or preventing it. 3. Objectives of the course: The student will be able to develop and demonstrate the structure, function and the organization of the human genome; the patterns of inheritance and clinical manifestations of genetic diseases. Chromosomes, chromosomal abnormalities, and the clinical features of common chromosomal disorders, population genetics, inborn errors of metabolism; and inherited cancer syndromes. To describe genetics in medical practice including recognizing congenital anomalies and syndromes, risk assessment and genetic counseling, genetic testing and screening, and plans for management and treatment.
Course content: (Enclosed)	Duration of the Course: 20hrs Admission: once in a year
	Eligibility for admission. Any UG / Interns / PG who is a student of RRMCH will be eligible for the admission to this course. Medium of teaching and examination. A. Medium of instruction of course will be in English. B. Evaluation of course will be on the basis of attendance, behavior and discipline Assignments, Practical knowledge obtained during the training period. C. Theory and practical examination After completion of evaluation / examination, certificate will be issued by RRMCH, affiliated to Dr. MGR Educational And Research Institute. The details of the Course Content (Syllabus)
Planned method of teaching — learning	The course is conducted through lectures that can be accessed online or offline using audiovisual aids
Planned method of assessment:	There will be a Final written exam for 50 marks and practical exam for 20 marks The student has to get 50% marks for successful completion of the course.

Syllabus

Course Objective	Program Objective	Core & Sub Competency	Duration
1. The student will be able to develop and demonstrate an understanding of the structure and function of genes and the organization of the human genome; the patterns of inheritance and clinical manifestations of genetic diseases; chromosomes, chromosomal abnormalities, and the clinical features of common chromosomal disorders; population genetics; inborn errors of metabolism; and inherited cancer syndromes.	A-1. Knowledge of the structure and function of the major organ systems, including the molecular, biochemical and cellular mechanisms for maintaining homeostasis A-2. Knowledge of the pathogenesis of diseases, interventions for effective treatment, and mechanisms of health maintenance to prevent disease	Structure and Function of Organ Systems Disease Pathogenesis and Treatment Knowledgeable	6hrs
2. The student will be able to describe genetics in medical practice including recognizing congenital anomalies and syndromes, risk assessment and genetic counseling, genetic testing and screening, and plans for management and treatment.	A-3. Knowledge of basic clinical skills required to meet the skills objectives, including interviewing, physical diagnosis, communication and clinical reasoning processes B-1. The ability to competently conduct a medical interview and counseling to take into account patient health beliefs, patient agenda and the need for comprehensive medical and psychosocial assessment	Basic Clinical Skills Medical Interview Knowledgeable Skillful	6hrs
3. The student will be able to acquire skills including how to elicit a comprehensive family medical history and construct a pedigree and how to recognize medical history and features that suggest genetic disease.	A-3. Knowledge of basic clinical skills required to meet the skills objectives, including interviewing, physical diagnosis, communication and clinical reasoning processes B-1. The ability to competently conduct a medical interview and counseling to take into account patient health beliefs, patient agenda and the need for comprehensive medical and psychosocial assessment	Basic Clinical Skills Medical Interview Knowledgeable Skillful	8hrs