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## **IMPLEMENTATION OF ELECTIVES**

**ELECTIVES POSTING – 2021 BATCH**

**(Date: 1<sup>st</sup> March 2025 to 15<sup>th</sup> March 2025)**

**BLOCK 1**

## DEPARTMENT OF ANATOMY

### ELECTIVE MODULE: MEDICAL GENETICS

**CODE : Anat - 01**

**No. of Students 15**

<b>Name of Block</b>	<b>1</b>
<b>Name of Elective</b>	Basics of Research Methodology for undergraduates with the help of preceptor initiated research
<b>Learning objectives of the elective</b>	<ol style="list-style-type: none"><li>1. To introduced basic of research</li><li>2. To learn about study designed and hypothesis</li><li>3. To learn statistical analysis</li><li>4. To learn how to write an abstract</li><li>5. Present abstract</li></ol>
<b>Prerequisites for the elective</b>	<ol style="list-style-type: none"><li>1. Printer</li><li>2. Bones from Bone library dept. of Anatomy,NKP SIMS, Nagpur &amp; Medical college</li><li>3. Black marker pen</li><li>4. Digital venire caliper</li><li>5. Protractor</li><li>6. Green cloth sheet</li></ol>
<b>Learning resources for students</b>	<ol style="list-style-type: none"><li>1. Gray's Anatomy Text book</li><li>2. Laptop &amp; Pen drive</li></ol>
<b>List of activities in which the student will participate</b>	<ol style="list-style-type: none"><li>1. Problems solving session on study design</li><li>2. Abstract presentation</li></ol>
<b>Portfolio entries required</b>	Documentation of work done Documentation of presentation done
<b>Log book entry required</b>	Log book with "M" grade
<b>Assessment</b>	Formative Attendance Performance of assigned tasks Presentation
<b>Other comments</b>	

**DEPARTMENT OF ANATOMY****ELECTIVE MODULE : MEDICAL GENETICS****CODE : Anat - 02****No. of Students 10**

<b>Name of Block</b>	<b>01</b>
<b>Name of Elective</b>	Hands on experience of clinical Anatomy by using Mannequins
<b>Learning objectives of the elective</b>	To demonstrate the living Anatomy Technique of administration of drug Various sites of administration of injection /Drug Students should able to know living Anatomy Students should able to identify various sites of administration of drug
<b>Prerequisites for the elective</b>	Subject & Maniquines
<b>Learning resources for students</b>	Text book of Living & surface Anatomy Gray's Anatomy
<b>List of activities in which the student will participate</b>	Students should work with demonstrator Should write abstract of work done Should able to demonstrate the objectives after each session
<b>Portfolio entries required</b>	Workbook enteries , Presentation
<b>Log book entry required</b>	Completion of posting signed by preceptor with a "meets expectation (M) grade"
<b>Assessment</b>	Formative: attendance Successful completion of learning objectives & Log book entry.
<b>Other comments</b>	

**Department of Physiology**

**ELECTIVE MODULE : NERVE CONDUCTION STUDY**

**CODE : Phy 01**  
**No. of Students 15**

<b>Name of the Block</b>	Pre-clinical
<b>Name of Elective</b>	Nerve conduction Study
<b>Learning Objectives of the elective</b>	<ul style="list-style-type: none"><li>- To understand principles of electrophysiological recording for nerve conduction</li><li>- To record nerve conduction velocity for motor and sensory nerve</li><li>- To learn abnormalities of nerve conduction in common diseases</li></ul>
<b>Prerequisite for the elective</b>	Booklet to be printed
<b>Learning Resources for the students</b>	Booklet will be provided
<b>List of activities in which students will participate</b>	<ul style="list-style-type: none"><li>- Lecture – cum-demonstration</li><li>- Hands-on-training</li><li>- Case-based learning</li></ul>
<b>Portfolio entries required</b>	Yes
<b>Log book entries required</b>	Yes
<b>Assessment</b>	Cognitive domain assessment through MCQs Psychomotor domain through Practical examination
<b>Other comments</b>	---

## Department of Physiology

### ELECTIVE MODULE : BRAINSTEM AUDITORY EVOKED POTENTIAL

**CODE : Phy 02**

**No. of Students 10**

<b>Name of the Block</b>	Pre-clinical
<b>Name of Elective</b>	Brainstem Auditory Evoked Potential
<b>Learning Objectives of the elective</b>	<ul style="list-style-type: none"><li>- To learn Anatomy and physiology of Auditory Pathway</li><li>- To Record BERA and study normal waves of BERA</li><li>- To know applications of BERA</li><li>- To learn abnormalities of waves in different diseased conditions</li></ul>
<b>Prerequisite for the elective</b>	booklet to be printed.
<b>Learning Resources for the students</b>	Booklet will be provided
<b>List of activities in which students will participate</b>	<ul style="list-style-type: none"><li>- Lecture – cum-demonstration</li><li>- Hands-on-training</li><li>- Case-based learning</li></ul>
<b>Portfolio entries required</b>	Yes
<b>Log book entries required</b>	Yes
<b>Assessment</b>	Cognitive domain assessment through MCQs Psychomotor domain through Practical examination
<b>Other comments</b>	---

## Department of Biochemistry

### ELECTIVE MODULE: CLINICAL BIOCHEMISTRY

**CODE : Biochem 01**

**No. of Students 30**

<b>Name of Block</b>	1
<b>Name of Elective</b>	Clinical Biochemistry
<b>Learning objectives of the elective</b>	A the end of 15 days, third MBBS student. Should be able <ol style="list-style-type: none"><li>1) To tell which parameters are routinely done in Laboratory.</li><li>2) To understand diagnostic significance of biochemical parameters .</li><li>3) To understand correlation between biochemical parameters and various diseases such as infectious ,endocrinal &amp; metabolic diseases.</li></ol>
<b>Number of students that can be accommodated in this elective</b>	20 Students
<b>Prerequisites for the elective</b>	Knowledge of pathophysiology of diseases. Students should attended at least 4-5 clinical postings in ward.
<b>Learning resources for students</b>	Tietz textbook of Biochemistry, Harper, Harrison
<b>List of activities in which the student will participate</b>	<ol style="list-style-type: none"><li>1) Report reading and interpretation of lab report</li><li>2) Participation in case discussion and finding which biochemical parameter is required to diagnose given case.</li></ol>
<b>Portfolio entries required</b>	-
<b>Log book entry required</b>	Yes
<b>Assessment</b>	<ol style="list-style-type: none"><li>a) Attendance</li><li>b) Entry of case studies and required biochemical parameters</li><li>c) Successful completion of posting and logbook entries</li></ol>
<b>Other comments</b>	Nil
<b>Name of Block</b>	1
<b>Name of Elective</b>	Clinical Biochemistry
<b>Location of hospital lab or research facility</b>	Medical College & Hospital Laboratory

## Department of Pathology

### ELECTIVE MODULE: HAEMATOLOGY-SCREENING FOR ANEMIA

**CODE : Patho 01**

**No. of Students 10**

<b>Name of Block</b>	Block 1
<b>Name of Elective</b>	Haematology-Screening for Anemia
<b>Learning objectives of the elective</b>	<ol style="list-style-type: none"><li>1. To enumerate clinical presentation of anaemia</li><li>2. To enumerate the testing protocol for commonly performed tests for anaemia</li><li>3. To Demonstrate the conduct of commonly available tests for diagnosis or anaemia</li><li>4. To obtain experience of using 5 part Haematology cell counter and interpretation of scatter plot in differentiating types of anaemia</li><li>5. To obtain experience of screening peripheral blood smear (PBS) to classify anaemias according to rbc morphology</li><li>6. To evaluate Bone marrow aspiration smear findings in different types of anaemia</li></ol>
<b>Prerequisites for the elective</b>	Universal Precaution required Immunisation
<b>Learning resources for students</b>	Haematology Practical Book
<b>List of activities in which the student will participate</b>	<ol style="list-style-type: none"><li>1) Participate in laboratory activities including<ol style="list-style-type: none"><li>a) Sample Collection</li><li>b) Sample processing</li><li>c) Use of 5 part hematology cell counter and interpretation of findings</li><li>d) PBS preparation, staining and interpretation</li><li>e) Bone marrow smear examination and interpretation</li></ol></li><li>2) Participate in academic programmes of the departments</li><li>3) Write up the laboratory work up of two cases of anaemia</li><li>4) Present at least two cases of anaemia in departmental academic sessions</li></ol>
<b>Portfolio entries required</b>	<ol style="list-style-type: none"><li>1) Documentation of performed tests</li><li>2) documentation of worked up cases</li></ol>
<b>Log book entry required</b>	Proforma Comments- Signature of Preceptor-
<b>Assessment</b>	Formative – <ol style="list-style-type: none"><li>a) Attendance</li><li>b) day to day participation in departmental activity</li><li>c) Performance of assigned task</li><li>d) Presentation of worked up cases in the department</li></ol>
<b>Other comments</b>	

**Department of Pathology**  
**ELECTIVE MODULE: SAFE BLOOD TRANSFUSION PRACTICES**  
**CODE : Patho 02**  
**No. of Students 10**

<b>Name of Block</b>	Block 1 (Blood Banking)
<b>Name of Elective</b>	“SAFE BLOOD TRANSFUSION PRACTICES”
<b>Learning objectives of the elective</b>	<ol style="list-style-type: none"> <li>1. Define Blood transfusion. Discuss the indications for blood transfusion.</li> <li>2. Enumerate donors selection criterion &amp; demonstrate types of blood collection bags.</li> <li>3. Enumerate the testing protocol for safe blood transfusion</li> <li>4. Enumerate blood transfusion reactions</li> <li>5. Demonstrate blood component preparation &amp; discuss rational use of blood</li> <li>6. Enumerate TTI. Discuss the testing protocol</li> <li>7. Attend a blood donation camp</li> <li>8. Define hemovigilance. Discuss documentation in blood bank.</li> <li>9. Evaluation</li> <li>10. Completion of log books / Feedback.</li> </ol>
<b>Prerequisites for the elective</b>	(Universal Precaution Certification)
<b>Learning resources for students</b>	Text book of hematology
<b>List of activities in which the student will participate</b>	<ol style="list-style-type: none"> <li>1. Demonstration of working of Blood bank (orientation to safe blood banking practical)</li> <li>2. Principles of BT &amp; Predonation workup</li> <li>3. Perform Blood group by tube method/ gel method</li> <li>4. Observe cross matching test by tube &amp; gel methods.</li> <li>5. Blood transfusion reaction workup (steps)</li> <li>6. Quality control in blood component preparation &amp; storage.</li> <li>7. Observe the testing of blood bags for TTI.</li> <li>8. Do predonation &amp; post donation counseling.</li> <li>9. Discuss about donors &amp; recipient vigilance.</li> <li>10. Evaluation</li> <li>11. Completion of log books</li> </ol>
<b>Portfolio entries required</b>	Observation of demonstrations, documentation of performed tests
<b>Log book entry required</b>	Proforma Comments- Signature of Preceptor-
<b>Assessment</b>	Attendance – Performance of assigned task.
<b>Other comments</b>	80 % Attendance is compulsory



**Department of Microbiology**

**ELECTIVE MODULE: HOSPITAL INFECTION PREVENTION & CONTROL**

**CODE : Micro 01**

**No. of Students 20**

<b>Name of Block</b>	01
<b>Name of Elective</b>	Hospital Infection Prevention & Control
<b>Learning objectives of the elective</b>	<ol style="list-style-type: none"><li>1. To enumerate organisms causing HAI , Type I HAI</li><li>2. To know the Standard precaution</li><li>3. Surveillance of HAI</li><li>4. To know the preventive measures</li></ol>
<b>Prerequisites for the elective</b>	Nil
<b>Learning resources for students</b>	Library , e-books , Reference Books , PPTS
<b>List of activities in which the student will participate</b>	<ol style="list-style-type: none"><li>1. Practical Demonstration</li><li>2. Visit to wards</li><li>3. CBL</li><li>4. Didactic Lectures</li></ol>
<b>Portfolio entries required</b>	Not required
<b>Log book entry required</b>	Yes
<b>Assessment</b>	MCQ , Attendance , Observation ( Activity)
<b>Other comments</b>	

**Department of Forensic Medicine & Toxicology**  
**ELECTIVE MODULE: WRITING SICKNESS & FITNESS CERTIFICATE**  
**CODE : FMT 01**  
**No. of Students 10**

Name of Block	Block 01
Name of Elective	Writing Sickness & Fitness certificate
Learning objectives of the elective	<ol style="list-style-type: none"> <li>1. What is Sickness &amp; Fitness</li> <li>2. Difference between Medical Fitness &amp; Physical Fitness</li> <li>3. Prepare Sickness Certificate</li> <li>4. Prepare Medical Fitness &amp; Physical Fitness</li> </ol>
Prerequisites for the elective	Must be well versed with the format for Sickness & Fitness certificate
Learning resources for students	<ol style="list-style-type: none"> <li>1. Modi's Medical Jurisprudence &amp; Toxicology : Dr. B.V. Subrahmanyam</li> <li>2. The essentials of Forensic Medicine &amp; Toxicology :- Dr. K. S. Narayan Reddy</li> <li>3. Principles of Forensic Medicine &amp; Toxicology: - Dr. Rajesh Bardale</li> </ol>
List of activities in which the student will participate	<ol style="list-style-type: none"> <li>1. To visit the wards</li> <li>2. To examine patients' record from files</li> <li>3. To understand the prerequisites for certification</li> <li>4. To prepare sickness &amp; Fitness certificate</li> <li>5. To understand medicolegal significance of correct certification</li> </ol>
Portfolio entries required	<ol style="list-style-type: none"> <li>1. Case records of at least ten patients</li> <li>2. Daily logs of certificate prepared with activities</li> </ol>
Log book entry required	Satisfactory completion of posting by a preceptor with a "meets expectation 'M' grade"
Assessment	<p>Attendance</p> <p>Successful completion of required portfolio entries</p> <p>Successful completion of log book with 'M' grade</p>
Other comments	None

**Department of Forensic Medicine & Toxicology**  
**ELECTIVE MODULE: WRITING MEDICAL CERTIFICATE OF AGE ESTIMATION**  
**CODE: FMT 02**  
**No. of Students – 10**

Name of Block	Block 1
Name of Elective	Writing Medical Certificate of Age estimation
Learning objectives of the elective	<ol style="list-style-type: none"> <li>1. Prerequisite investigations for certification of Age estimation.</li> <li>2. Preparation of check list for certification of Age estimation.</li> <li>3. Preparation of Medical certificate of Age estimation.</li> <li>4. Medicolegal significance of Age.</li> <li>5. Maintenance and preservation of proper records of Age estimation certificate.</li> </ol>
Prerequisites for the elective	Data regarding Age estimation
Learning resources for students	<ol style="list-style-type: none"> <li>4. Modi's Medical Jurisprudence &amp; Toxicology : B.V. Subrahmanyam</li> <li>5. The essentials of Forensic Medicine &amp; Toxicology :- Dr. K. S. Narayan Reddy</li> <li>6. Principles of Forensic Medicine &amp; Toxicology: - Dr. Rajesh Bardale</li> </ol>
List of activities in which the student will participate	<ol style="list-style-type: none"> <li>1. Will learn prerequisites before certifying Age estimation of the patient.</li> <li>2. Will develop standardized checklist for Age estimation certificate preparation.</li> <li>3. Will preserve the records of Age estimation certificate prepared.</li> <li>4. Will understand precautions while handing over Age estimation certificate.</li> <li>5. Will understand the medicolegal significance of preparing correct Age estimation certificate.</li> </ol>
Portfolio entries required	<ol style="list-style-type: none"> <li>3. Case record of at least ten patients</li> <li>4. Daily logs of Age estimation certificate</li> </ol>
Log book entry required	Satisfactory completion of posting by a preceptor with "Meets expectation grade" "M grade"
Assessment	<p>Attendance</p> <p>Successful completion of required portfolio entries</p> <p>Successful completion of log book with 'M' grade</p>
Other comments	NIL

**Department of Forensic Medicine & Toxicology**  
**ELECTIVE MODULE: WRITING MEDICAL CERTIFICATE OF CAUSE OF DEATH**  
**CODE: FMT 03**  
**No. of Students – 10**

Name of Block	Block 1
Name of Elective	Writing Medical Certificate of cause of death
Learning objectives of the elective	<ol style="list-style-type: none"> <li>6. Prerequisite investigations for certification of death.</li> <li>7. Preparation of checklist for certification of death.</li> <li>8. Preparation of Medical certificate of cause of death.</li> <li>9. Medicolegal significance of MCCD.</li> <li>10. Maintenance and preservation of proper records of MCCD.</li> </ol>
Prerequisites for the elective	<p>Must be well versed with form no.4 &amp; 4A for MCCD</p> <p>Knowledge of basic investigations before declaring death, pathophysiology of various diseases.</p>
Learning resources for students	<ol style="list-style-type: none"> <li>7. Modi's Medical Jurisprudence &amp; Toxicology : B.V. Subrahmanyam</li> <li>8. The essentials of Forensic Medicine &amp; Toxicology :- Dr. K. S. Narayan Reddy</li> <li>9. Principles of Forensic Medicine &amp; Toxicology: - Dr. Rajesh Bardale</li> </ol>
List of activities in which the student will participate	<ol style="list-style-type: none"> <li>6. To learn prerequisites before certifying death of the patient.</li> <li>7. To develop standardized checklist for MCCD preparation.</li> <li>8. To fill the MCCD form no. 4 and 4A following a standardized checklist.</li> <li>9. To preserve the records of MCCD prepared.</li> <li>10. To understand precautions while handing over MCCD.</li> <li>11. To understand the medicolegal significance of preparing correct MCCD.</li> </ol>
Portfolio entries required	<ol style="list-style-type: none"> <li>5. Case records of at least ten patients</li> <li>6. Daily logs of certificate prepared with activities</li> </ol>
Log book entry required	Satisfactory completion of posting by a preceptor with "Meets expectation grade" "M grade"
Assessment	<p>Attendance</p> <p>Successful completion of required portfolio entries</p> <p>Successful completion of log book with 'M' grade</p>
Other comments	NIL

**Department of Pharmacology**  
**ELECTIVE MODULE: PRESCRIPTION WRITING**  
**CODE : Pharma 01**  
**No. of Students 20**

<b>Name of Block</b>	Block 1
<b>Name of Elective</b>	Prescription writing
<b>Learning objectives of elective</b>	<ol style="list-style-type: none"> <li>1. To write a complete, rational and correct prescription for a given condition</li> <li>2. To write the points to be communicated to a volunteer about disease and prescription</li> <li>3. To communicate a given prescription to a volunteer.</li> <li>4. To enumerate parameters analyzed in prescription auditing</li> <li>5. To describe WHO core drug use indicators</li> <li>6. To perform critical appraisal of a given prescription.</li> </ol>
<b>Prerequisites for elective</b>	Necessary precaution while writing a prescription, benefits of prescribing generic drug name, stationery, printed log book
<b>Learning resources for students</b>	The departmental handbook provided, Aricles
<b>List of activities of student participation</b>	<ol style="list-style-type: none"> <li>1. Work daily with a supervisor in observing, how to write a prescription</li> <li>2. Participate in departmental education activities</li> <li>3. Present at least two case scenarios done by the student as a case work up</li> <li>4. Present at least two cases in a departmental academic forum</li> </ol>
<b>Portfolio entries required</b>	Assignments provided <ol style="list-style-type: none"> <li>1. Documentation of two case that have been presented</li> <li>2. Documentation of presentation (OSPE/SGD) done</li> <li>3. Documentation of learning as summary and self reflection</li> </ol>
<b>Log book entry required</b>	Completion of posting signed by preceptor with a "Meets expectation '(M)' grade"
<b>Assessment</b>	Formative: attendance: day-to-day participation in the departmental activity; performance of assigned tasks and presentation of worked up case in department
<b>Other comments</b>	-

**Department of Community Medicine**  
**ELECTIVE MODULE: NUTRITION IN CHRONIC DISEASES**  
**CODE: PSM 01**  
**No. of Students 30**

<b>Name of Block</b>	1
<b>Name of Elective</b>	NUTRITION IN CHRONIC DISEASES
<b>Learning objectives of the elective</b>	<ol style="list-style-type: none"><li>1. To understand the key food systems and diet related risk factors to chronic diseases</li><li>2. To enhance students' capacity towards skill-based learning in nutritional assessment</li><li>3. Enabling students to advice diet plan for specific chronic diseases</li></ol>
<b>Prerequisites for the elective</b>	Basic knowledge of food groups and nutrition
<b>Learning resources for students</b>	Textbook of Community Medicine by K.Park WHO TCS manual on Nutrition and Chronic diseases <a href="http://www.nin.res.in">www.nin.res.in</a>
<b>List of activities in which the student will participate</b>	Preparation of therapeutic diet plan for various chronic diseases Interactive sessions Group discussions
<b>Portfolio entries required</b>	NA
<b>Log book entry required</b>	NA
<b>Assessment</b>	Attendance Summative assessment
<b>Other comments</b>	



Dr. Madhur Gupta  
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