



TEXILA
AMERICAN UNIVERSITY

CLINICAL HANDBOOK



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About the Handbook

This handbook is the official publication of Texila American University College of Medicine. It provides information clinical science program of TAUCOM. We hope that students find the contents interesting and useful as they begin their journey and progress through their medical education. Students are encouraged to keep this handbook accessible as it contains useful information.

This handbook has been compiled for the information and benefit of the students, the policies mentioned in this handbook must be adhered to, by all the students. The policies and procedures are reviewed and revised periodically. If and when such changes are made, the students will be provided with proper notification. Students will be bound by any change, amendment, revision, addition, or deletion of TAUCOM policies. Students are expected to be familiar with the most recent version of these policies and procedures. TAUCOM reserves the right to make any changes in this handbook when determined by the college to be in the best interest of the students and deemed necessary.

TAUCOM operates in an English-speaking country and English is the primary language of instruction and assessment.

The Clinical handbook is an extension of the TAUCOM student handbook and includes specific information on clinical rotation. Students are required to familiarize with the student handbook and the policies contained therein.

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Vision and Mission

Vision

To lead in advancing human health through the best clinical care, innovative research, and education of health professionals in modern medicine in a culture that supports diversity, inclusion, critical thinking, and creativity.

Mission

- To create health professionals for excellence in the contemporary world of tomorrow.
- To create doctors with compassion for the poor and rich alike.
- To instill excitement about health science in young minds.
- To generate awareness in the application of health science and wellness for the welfare of society.
- To provide a supportive global learning and research environment in health and allied sciences rising above the geographical and cultural boundaries.

Clinical Program Objectives

Educational objectives are organized according to the six competency categories used for the MD Program Educational Objectives.

At the end of the clerkship, after attending the ambulatory clinics, small group discussion topics, workshops, standardized patient sessions and reading the assigned material the students should be able to:

Program Competencies	Educational Objectives
PC 1: Medical Knowledge Medical Graduates, must be able to demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.	<ol style="list-style-type: none">1 Demonstrate understanding of current core knowledge of basic biomedical science through an interdisciplinary approach to the understanding of the processes that support normal development, structure and function of the human organism.2 Demonstrate understanding of current core knowledge of normal and altered structure and function of organ systems, in order to apply that knowledge to the recognition and management of complex clinical conditions3 Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan.4 Apply knowledge of the scientific method in medical diagnosis and treatment and in research. The student should be able to evaluate published findings and to apply scientific evidence-based reasoning to the solution of medical problems.5 Demonstrate understanding of the impact of the various stages of life, as well as the effects of gender, life style, socioeconomic status, nutritional factors, genetic characteristics, psychosocial and epidemiologic factors, and culture upon the quality of human

	<p>health and the prevalence of disease, disease prevention and health maintenance.</p> <ol style="list-style-type: none"> 6 Exhibit appropriate professional behavior in interactions with patient and their families, peers and other healthcare professionals to adhere to professional standards of ethical behavior, and to function harmoniously and respectfully as a member of a diverse health care team. 7 Demonstrate mastery of the curriculum essential to progress along the pathway toward licensure for the practice of medicine. 8 Display skills of independent, life-long, and progressive learning. 9 Manifest self-awareness, self-care, self-assessment, and personal growth sufficient to be a role model for others. 10 Show sensitivity toward the need to address and resolve health disparities at all levels.
<p>PC 2: Professionalism</p> <p>Medical Graduates must be able to demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.</p>	<ol style="list-style-type: none"> 1 Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan. 2 Demonstrate mastery of a variety of skills, such as effective communication during interviewing patients and educating patients about their diseases and communicating with their families. The student must also demonstrate appropriate skills during physical examinations (proper use of instruments; application of manual techniques) and in utilization of laboratory resources (ordering appropriate tests; interpreting values). 3 Display skills of independent, life-long, and progressive learning.
<p>PC 3: Patient Care</p> <p>Medical Graduates must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.</p>	<ol style="list-style-type: none"> 1 Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan. 2 Demonstrate understanding of the impact of the various stages of life, as well as the effects of gender, life style, socioeconomic status, nutritional factors, genetic characteristics, psychosocial and epidemiologic factors, and culture upon the quality of human health and the prevalence of disease, disease prevention and health maintenance. 3 Demonstrate an understanding of the fundamental concepts of continuity of care (preventive, rehabilitative and end-of-life) in addition to the diagnosis of acute medical problems, and be able to apply these concepts to clinical practice on a local, regional, national or international level.

	<p>4 Demonstrate mastery of a variety of skills, such as effective communication during interviewing patients and educating patients about their diseases and communicating with their families. The student must also demonstrate appropriate skills during physical examinations (proper use of instruments; application of manual techniques) and in utilization of laboratory resources (ordering appropriate tests; interpreting values).</p> <p>5 Display skills of independent, life-long, and progressive learning.</p> <p>6 Show sensitivity toward the need to address and resolve health disparities at all levels.</p> <p>7 Show mastery of the scholarly expectations of the medical faculty of the College of Medicine as determined by appropriately designed and applied assessment methodologies, including but not limited to written examination performance and practical clinical skills.</p>
<p>PC 4: Interpersonal and Communication Skills</p> <p>Medical Graduates, must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, patients' families, and professional associates.</p>	<p>1 Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan.</p> <p>2 Demonstrate mastery of a variety of skills, such as effective communication during interviewing patients and educating patients about their diseases and communicating with their families. The student must also demonstrate appropriate skills during physical examinations (proper use of instruments; application of manual techniques) and in utilization of laboratory resources (ordering appropriate tests; interpreting values).</p> <p>3 Display skills of independent, life-long, and progressive learning.</p>
<p>PC 5: Systems-Based Practice</p> <p>Medical Graduates must be able to demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.</p>	<p>1 Demonstrate understanding of the impact of the various stages of life, as well as the effects of gender, life style, socioeconomic status, nutritional factors, genetic characteristics, psychosocial and epidemiologic factors, and culture upon the quality of human health and the prevalence of disease, disease prevention and health maintenance.</p> <p>2 Demonstrate an understanding of the fundamental concepts of continuity of care (preventive, rehabilitative and end-of-life) in addition to the diagnosis of acute medical problems, and be able to apply these concepts to clinical practice on a local, regional, national or international level.</p>
<p>PC 6: Interprofessional Collaboration</p> <p>Medical Graduates, must be able to maintain an</p>	<p>1 Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to</p>

<p>Interprofessional collaboration, is the process of developing and maintaining effective interprofessional working relationships with learners' practitioners, patients/clients/ families and communities to enable optimal health outcomes.</p>	<p>formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan.</p> <ol style="list-style-type: none"> 2 Demonstrate mastery of a variety of skills, such as effective communication during interviewing patients and educating patients about their diseases and communicating with their families. The student must also demonstrate appropriate skills during physical examinations (proper use of instruments; application of manual techniques) and in utilization of laboratory resources (ordering appropriate tests; interpreting values). 3 Display skills of independent, life-long, and progressive learning.
<p>PC 7: Practice-Based Learning and Improvement</p> <p>Medical Graduates must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.</p>	<ol style="list-style-type: none"> 1 Apply knowledge of the scientific method in medical diagnosis and treatment and in research. The student should be able to evaluate published findings and to apply scientific evidence-based reasoning to the solution of medical problems. 2 Manifest self-awareness, self-care, self-assessment, and personal growth sufficient to be a role model for others.
<p>PC 8: Personal and Professional Development</p> <p>The aim of personal and professional development is to help Medical Graduates manage their own learning and growth throughout the career. It is important that Medical Graduates continue to learn and develop to keep their skills and knowledge up to date and ensure you continue to work safely, legally and effectively.</p>	<ol style="list-style-type: none"> 1. Demonstrate the ability to evaluate patients and properly manage their medical problems by (a) completing comprehensive histories and physical examinations, (b) obtaining focused histories and perform relevant physical examinations (c) to correctly identify patients' medical problems through critical thinking and to formulate hypotheses as to etiology and solutions; (d) successful development of diagnostic strategies; and (e) formulation and implementation of management plan. 2. Demonstrate mastery of a variety of skills, such as effective communication during interviewing patients and educating patients about their diseases and communicating with their families. The student must also demonstrate appropriate skills during physical examinations (proper use of instruments; application of manual techniques) and in utilization of laboratory resources (ordering appropriate tests; interpreting values). 3. Display skills of independent, life-long, and progressive learning.

TAUCOM Clinical Sites

Teaching Hospital Name	Family Medicine	Internal Medicine	Ob/Gyn	Pediatrics	Psychiatry	Surgery
Georgetown Public Hospital Corporation, GPHC, Guyana	X	X	X	X	X	X
Tucson Medical Center Tucson, Arizona, United States of America	X	X	X	X	X	X

Clinical Science Program

Study in the Clinical Science Division encompasses the third and fourth year of the MD program. The clinical curriculum consists of 76 weeks of “clinical clerkships” during which students participate in patient care. While rotating through various medical specialties, in cooperating teaching hospitals or other approved health care facilities, students are under the guidance of clinical faculty, and under the general supervision of Texila American University’s Clinical Science department. USMLE Step 1 is a requirement for students to participate in clerkships for 76 weeks; this includes 48 weeks of required core clerkships and 28 weeks of elective clerkships. Faculty members in the Clinical Science Division are staff physicians at affiliated hospitals and health care facilities.

Core Clerkships (48 weeks)

1. Internal Medicine – 12 weeks
2. General Surgery – 12 weeks
3. Pediatrics – 6 weeks
4. Psychiatry – 6 weeks
5. Obstetrics / Gynecology – 6 weeks
6. Family Medicine – 6 weeks

Elective Clerkships (28 weeks)

The electives offered by TAUCOM complements the core and expose the clerks to additional experiences in their discipline of choice. For the completion of credit requirement, the student must successfully complete any 7 elective clerkships.

The list of elective clerkships includes but is not limited to:

1. Anesthesia – 4 weeks
2. Cardiology – 4 weeks
3. Dermatology – 4 weeks
4. Emergency Medicine – 4 weeks
5. Orthopedics – 4 weeks
6. Infectious Diseases – 4 weeks
7. Ophthalmology – 4 weeks
8. Radiology – 4 weeks
9. Otorhinolaryngology (ENT) – 4 weeks
10. Neurosurgery - 4 weeks
11. Nephrology - 4 weeks
12. Critical Care/ICU - 4 weeks
13. Neonatology - 6 weeks

14. High Risk Obstetrics

- 6 weeks

To continue to the clinical program, students must complete the Basic Science Program, clear the Basic Science exit exams, and maintain good academic and financial standing.

Clinical rotations will be assigned to the students by the Clinical Coordinator. If students wish to change and/or cancel a clerkship rotation after it has been confirmed by TAUCOM, students must make a request for this change to the Department of Clinical Affairs at least thirty (30) days before the first day of the rotation. It is the student's responsibility to notify the school of any changes and not the hospital. Requests for cancellation and/or changes must be made in writing and sent to the Department of Clinical Affairs via email

1. Internal Medicine: 12 weeks

Internal Medicine is primarily an inpatient service experience in which students will apply concepts of diagnosis and management to hospitalized and ambulatory patients. Experiences will focus on areas traditionally identified and related to internal medicine; for example, the path physiology of non-surgical diseases, and the application of non-surgical diagnostic and therapeutic techniques. Internal Medicine experiences will take place primarily on general medical/surgical floors and specialty units. Any outpatient experiences will be designed to provide students with an understanding of routine care performed in the physician's office/clinic, and will be at the discretion of the Attending/Preceptor.

2. General Surgery: 12 Weeks

Surgery is primarily an inpatient service experience with some outpatient clinical experience in the surgeon's office where students will learn to recognize and assist in the treatment of disease during which surgery may play a role in a patient's treatment and recovery. Students will learn basic surgical procedures, asepsis, correct handling of tissue, and technical skills to assist the surgeon in the operating room. Students will assist in pre- and post-operative care to learn various surgical treatments and to recognize potential risks associated with respective treatments.

3. Pediatrics: 6 Weeks

The Pediatric clerkship experience introduces the student to a unique, complex, and challenging field of medicine. It emphasizes those aspects of general pediatrics important for all medical students, and will provide a foundation for those students who elect to further study the health care of infants, children, and adolescents. Students have the opportunity to participate in the clinical activities of both general and subspecialty pediatric services, but the emphasis in all services is placed on basic issues and common illnesses. Subspecialists have the opportunity to emphasize aspects of their particular area of focus that are important for the education of the general physician.

4. Psychiatry: 6 Weeks

The goals of the Psychiatric Clerkship are to teach the students a scientific way of making a differential diagnosis and prescribing treatment. The students should learn that a mental illness, like other illnesses, can be treated and controlled. On the in-patient and out-patient services, the student should have a frontline responsibility for patient care under close supervision of the residents and attending physicians. That should include a full evaluation; students should take part in deciding appropriate treatment and testing. Students are encouraged to discuss their opinions with their instructors.

5. Obstetrics & Gynecology: 6 Weeks

Obstetrics and Gynecology clerkship experiences are integrated into the rotation to provide students with an understanding of routine OB/GYN care performed in both inpatient and outpatient setting and physician's office. The outpatient experiences may be met in a clinic or a preceptor's office. Students will be required to take call, attend conferences, and read suggested literature.

Students will perform selected technical skills necessary to provide ante-partum care, postpartum care, and pre- and post-op care of gyne-surgical patients. They will practice skills and techniques to do normal, uncomplicated deliveries and will participate in the management of more complex problems in obstetrics. Emphasis will be placed on pelvic exams and identifying pathology. Attention will be directed to the psychosocial impact of pregnancy and gynecologic disease on the female patient and the family unit.

6. Family Medicine: 6 Weeks

Family Medicine is a major part of general practice in the USA and is gaining more importance in the socio-economic climate of the United States. With the advent of managed care primary care physicians are the mainstay of the medical services which is responsible to deliver health care in a responsible, cost-effective manner. The concept of the healthy family is the goal of the department. The medical students should be able to address the healthcare issues in the context of family and the society. The department also is addressing all areas of prevention namely primary, secondary and tertiary as well as curative aspects of illness. The medical student should get exposure in all primary areas in medicine, both inpatient and outpatient settings. The student should be exposed to geriatrics, well-baby clinics, pre-natal and intra-partum care, etc.

ELECTIVE ROTATIONS: 4 weeks

Goal

The goals of the Elective Clerkships are exposed to the students to the specialty variation in the clinical practice in the specified specialty /subspecialty and to provide diagnostic skills to assist the future physicians in General Practice.

The student will be exposed to specialty practices and investigations pertinent to the particular specialty. The student will get a chance to experience the specific field helping him/her to choose a specialty if desired.

Learning Objectives

The students are expected to learn to:

- Conduct specialty evaluation related to the special field.
- Formulate a broad differential diagnosis.
- Plan a treatment and management of patients.
- Be familiar with major diseases in the particular field with the understanding of the physiology and pharmacotherapy.
- Recognize medical conditions which may exacerbate Furthermore, students are expected to read from the textbooks and the current journals on topics related to the clinical cases of their patients.

Approval of Electives

1. Electives are chosen at the discretion of the student, under the guidance of the Clinical

Office (Associate Dean of Clinical Affairs), based on the student's academic and career goals. Pre-requisites for the desired elective must be completed prior to the enrollment

2. A student may choose to do any electives at any TAUCOM affiliated clinical, site as long as he/she meets the academic requisites required for the elective
3. Upon completion of the request for elective rotation approval must be taken from Associate Dean for Clinical Affairs.
4. No rotations will be offered at other hospitals without formally established relationships.
5. Special approval by the Associate Dean for Clinical Affairs is needed before the same elective rotation can be taken for the second time.
6. All electives are intended to last a minimum of four (4) weeks.

List of Elective Rotations at TAUCOM Clinical Sites

Guyana:

1. Anesthesia
2. Cardiology
3. Dermatology
4. Emergency Medicine
5. Family Medicine
6. Infectious Diseases
7. Neurosurgery
8. Nephrology
9. Nuclear Medicine
10. Ophthalmology
11. Orthopedics
12. Otorhinolaryngology
13. Physical Medicine and Rehabilitation
14. Pulmonology
15. Radiology
16. Critical Care/ICU
17. Neonatology
18. High Risk Obstetrics

USA:

1. Anesthesia
2. Anesthesia Clinical Research
3. Asthma
4. Cardiology

5. Clinical Research
6. Colorectal Surgery
7. Critical Care
8. Dermatology
9. Emergency Medicine
10. Endocrinology
11. ENT
12. Family Medicine
13. Gastrointestinal
14. Geriatrics
15. Hematology
16. Immunology
17. Internal Medicine
18. Interventional Cardiology
19. Neonatology
20. Nephrology
21. Neurology
22. Neurosurgery
23. Nutrition
24. OB-GYN
25. Occupational Medicine
26. Oncology
27. Ophthalmology
28. Orthopedic Surgery
29. Pain Management
30. Pediatric Cardiology
31. Pediatric Surgery
32. Pediatrics
33. Plastic Surgery
34. Primary Care
35. Psychiatry
36. Pulmonary Medicine
37. Radiation Oncology
38. Radiology

39. Rural Medicine
40. Sleep Medicine
41. Sport Medicine
42. Surgery
43. Urgent Care
44. Urology

Extramural Electives

Students may choose to perform electives at a hospital other than TAUCOM affiliated clinical sites. Students are required to contact the clinical office to initiate the process. There has to be a written contract between the Medical School (or teaching hospital) and TAUCOM which will define the relationship between the parties. All the logbooks and evaluation form requirements are same for extramural electives as the regular electives. Students are required to contact the clinical office at least two months in advance to initiate the extramural elective process.

The clinical site must be pre-approved by the Dean before the agreement is signed.

Following are the steps on taking extramural electives:

- Student will inform the Student Affairs for intent of taking Electives in their home country.
- Orientation regarding taking electives on their home country will be given to the student.
- Student will write a letter address to the Dean's Office that they will take Elective Rotation in their home country. A maximum of 2 electives will be allowed to be done by the student.
- Student are obligated to find a teaching hospital that will cater the elective they want. Preferably a tertiary teaching hospital or an accredited teaching institution on which the elective chosen is specialized on that elective.
- Student will be sending the information of the hospital through email. They need to have the following details:
 - a. Name of the hospital
 - b. Address of the hospital
 - c. Official Website of the hospital
 - d. Department name
 - e. Name and Designation of the Clinical HOD
 - f. Email and other contact details of HOD
- After all paper works are done by the student, approval will be taken from the Dean of the College of Medicine upon which Single Elective Affiliation Agreement will be send to the student to obtain signature from the HOD
- The Clinical Coordinator will release a logbook for the student and will be send to the HOD for its evaluation.
- The Evaluated logbook which is sealed and signed by the HOD will be sent back to the Clinical Coordinator to be printed and deliver to the Dean's Office for signature, then logbook will be uploaded to ERP.
- Then next elective endorsement letter will be release for the next elective rotation. If the student would like to transfer to another teaching hospital, the student needs to begin the process.

Visiting Students

TAUCOM has elective opportunities available at its clinical sites for students from other medical schools. To be eligible for consideration, students must meet the following criteria:

Visiting students must be a candidate for the M.D. degree in good standing in a recognized medical school. Visiting students shall be limited to a maximum of (8 weeks) of experiences at our campuses during their medical school career. Electives will be assigned to visiting students only after all TAUCOM students have been scheduled.

All visiting students must have:

- Coverage for malpractice/liability insurance in the amount of \$1 million per incident and \$3 million aggregate from their institution or from acceptable other sources,
- personal health insurance,
- required immunizations for measles and rubella,
- completed the Hepatitis B vaccine series,
- taken a TB skin test within the past year,
- have proof of COVID vaccines required by our clinical affiliates. Exemptions cannot be accepted at this time,
- have current BLS/ACLS certification at time of scheduled rotation,
- proof of a mask fit test, and

Home school must be willing to enter into an affiliation agreement with TACUCOM.

Visiting students must have completed instruction in the basic physical examination and have a working knowledge of general ward procedures. All electives require that the student has completed the basic Family Medicine, Internal Medicine, Pediatrics, Surgery, Psychiatry, and Obstetrics-Gynecology clerkships.

All students must have met the prerequisites of the clerkship to which they are applying

Clinical Rotation

Orientation

Orientation is provided to all students at the beginning of every rotation and at the beginning of their first clinical rotation. The orientation structure varies slightly based on the location but in general addresses course specific information and important policies relating to clinical rotations and documentation to be completed.

Schedule of Daily Activities

The regular hours of rotation shall be 8 hours between 7 am to 6 pm daily, Monday to Friday excluding oncall and duty status. Students should attend all scheduled didactic lectures, journal club, grand rounds and clinic-pathologic conference or any activities needing the active participation of the student.

The daily schedule shall include the following but not limited to:

- Morning teaching rounds, ward work, laboratory and diagnostic correlations.
- Afternoon teaching rounds and laboratory and diagnostic correlations; and ward work.
- Ambulatory care - Clinics/OPD, including Specialty Clinics, Out Patient Surgeries, endoscopy lab and special diagnostics.
- Didactic lectures – with small group discussions

- Surgical Suite* - applicable only in surgical specialties
- Admission/Handover Conference
- Discharge conference
- Grand Rounds*
- Clinic-pathologic Conference*
- Journal Club*
- Morbidity & Mortality Conference*
- *Does not occur on a daily basis. Scheduling dependent on individual hospital and/or departmental policy.

Daily activities are governed by the nature of the rotation; however, each rotation will provide a daily schedule to be followed that is updated periodically and incorporated into the rotation logbook. The dynamic nature of clinical practice is inherently understood and often dictated by patient needs.

Patient Exposure

The clerks shall be assigned to at least two to three new patients weekly in Core Rotations in the inpatient and ambulatory and emergency setting. In elective rotations, one new patient daily shall be seen in the in-patient, ambulatory or emergency care setting and similarly limited to a total of seven patients (wherever applicable).

The patient(s) are not limited to new admission or consults, and shall include a complete history and physical examination, such as in the cases of transfer of service and interdepartmental referrals. The clerks must, at the minimum, complete a comprehensive history, physical examination, progress notes, chart review (including diagnostic correlation and review of medicines), and discharge summary.

Class Contact Hours

To ensure maximum patient exposure, class contact hours shall be limited to no more than eight hours per week. These hours include but not limited to: didactic lectures, morbidity mortality conference, tumorboard, article critique (journal club), clinic-pathologic conference and grand rounds.

Dress Code

Your personal appearance is the first statement you make about yourself and your profession to patients, other health professionals and to the public. Our programs are located both on our campus and in off-campus settings that will bring you in contact with patients, health professionals and other visitors. Dress is an outward reflection of your professional attitude. As health professional students you are seen as representatives of the profession of medicine.

- Scrubs permitted by the University should be always clean, neat without wrinkles. This should be in appropriate size and length, only black slacks are allowed and hemline not touching the floor, do not wear jeans or shorts. Scrubs tops that expose the chest or cleavage MUST be covered with undershirt. Students should wear solid white, grey or black crew neck t-shirts under scrub tops. Long sleeves in the same 3 colors allowed. Always bring your white coat. Your coat must be clean, pressed and worn at all times. Wear your name tag in an easily viewable location

- Students should wear appropriate clean shoes and socks with their scrubs. Shoes must be black, brown, grey or white with closed toe, non-skid sole, free from obvious colors and logos. Shoes must not be scuffed, dingy, unpolished or untied. No tennis shoes with mesh, boots, sandals, opened-toed shoes.
- **FINGERNAILS:** Nails should be neat and clean. No artificial nails or extenders nails; natural nails must not be longer than ¼ inch long and polish is NOT allowed.
- **GROOMING/ FRAGRANCE:** Due to close contact with patients, guests and other members of the healthcare team, all medical students must be clean and maintain appropriate personal hygiene with regard to their body, hair and nails. Scented body lotions, fragrances and colognes should not be used to excess and may not be worn in patient areas. Cosmetics, if worn, must be modest. Medical students must exhibit good personal hygiene at all times.
HAIR: Hair must be neat and not distracting (not, for example, fluorescent or neon colors or stripes.) Hair must not interfere with an employee's ability to provide patient care. When providing patient care. Hair longer than shoulder length for female must be contained and pulled back, male should have appropriate short and neat haircut. Short neatly trimmed beards no longer than half inch below the chin and mustaches are acceptable. Head coverings accepted when associated with professional, medical or religious rationale or are required for reasons
- **TATTOOS:** Visible tattoos must be covered.
- **JEWELRY:** Hand jewelry are not allowed. Only stud earring allowed for female. Jewelry should be small and in good taste and not interfere with job performance. Jewelry may not be worn in any other facial/tongue piercings during duty hours

Professional Behavior

All students are expected to exhibit professional behavior at ALL times during their time at the clinic and/or hospital. In addition, students are expected to dress appropriately and comport themselves in a manner that will demonstrate respect, inspire trust, and ensure patient comfort.

The student will show concern for the welfare of patients. He/she will:

- display a professional attitude in all interactions with patients;
- act appropriately and respectfully in all verbal and nonverbal interactions with patients;
- treat patients with respect and dignity, both in the presence of patients and in discussions with professional colleagues; and
- display concern for the total patient.

The student will show concern for the rights of others. He/she will:

- demonstrate a considerate manner and cooperative spirit in dealing with professional staff, colleagues, and members of the health-care team;
- treat all persons encountered in a professional capacity with equality regardless of race, religion, sex, handicap, or socioeconomic status; and
- assume an appropriate and equitable share of duties among his/her peers and colleagues.

The student will show evidence of responsibility to duty. He/she will:

- effectively and promptly undertake duties, follow through until their completion, and notify appropriate persons in authority of problems; obligations;
- notify course and clinical clerkship directors (or other appropriate person) of absence or inability to attend to duties;
- see assigned patients regularly and, with appropriate supervision, assume responsibility for their care; and
- ensure that he/she can be promptly located at all times when on duty.

The student will be trustworthy. He/she will:

- be truthful and intellectually honest in all communications;
- accept responsibility and establish priorities for meeting multiple professional demands and for completing work necessary for the optimal care of patients;
- accurately discern when supervision or advice is needed before acting; and
- maintain confidentiality of all patient information.

The student will maintain a professional demeanor. He/she will:

- maintain appropriate standards of personal appearance, attire, and hygiene for the patient population served;
- maintain emotional stability and equilibrium under the pressures of emergencies, fatigue, professional stress, or personal problems; and
- be responsible in the use of alcohol and prescription drugs and avoid their effects while on duty.

The student will possess those individual characteristics required for the practice of medicine. He/she will:

- be capable of making logical diagnostic and therapeutic judgments;
- communicate effectively with patients, supervisors, and peers;
- establish appropriate professional relationships with faculty, colleagues, and patients; and
- show evidence of the ability to be perceptive, introspective, and insightful in professional relationships

Training

Periodic training, workshops and seminars on medical education shall be conducted by the Medical Education Department (MED) through the Faculty Development Program. This shall include career counselling, seminars or workshops on various clinical & research topics.

Attendance

- Taking and updating of students' attendance falls under the purview of the Clinical preceptor(s)/faculty and the Clinical Head of Departments
- Attendance must be taken within 15 minutes at the onset of didactic classes or activity.
- Students coming in after 15 minutes from stipulated time shall be marked absent, but is required to attend the remaining time allotted
- There will only be ONE attendance in subjects over one (1) period long. Not two.
- A mandatory attendance of 90% is required to be eligible for End-Rotation Exams

90% attendance in mandatory in clinical rotations and students who fall short will have to repeat the entire rotation and will be responsible for the associated cost. Students can request excused absence depending on the nature of their situation however, if there are cost associated with cancellation or scheduling of rotation students will have to bear the expense.

Evaluation

Students are evaluated during the clerkships by

- Observing their bedside manners
- Case Presentations
- Clinical Procedures
- Demonstrations
- OSCE

Clinical Grading – Core Rotations

Over-All Final Grade Components	Max. Marks
CLINICAL PERFORMANCE a. Mid- Rotation Assessment – 20% b. End- Rotation Assessment – 20 %	40
MEDICAL KNOWLEDGE End Rotation Exams Theory – 20%	20
FORMATIVE EXPERIENCES End Rotation Exams OSCE – 40%	40
(Clinical Competence + Rotation OSCE + Theoretical End Rotation Exams) Convert to percentage	100 %

Clinical Grading Elective Rotations

Over-All Final Grade Components	Max. Marks
CLINICAL PERFORMANCE	60
MEDICAL KNOWLEDGE	40
(Clinical Competence + Rotation OSCE + Theoretical End Rotation Exams) Convert to percentage	100 %

Advisable Minimum Number of Cases

Minimum number of at least twenty different non-procedural and procedural cases (planned management & diagnostic), shall be determined by the Clinical Head of Department in each rotation and approved by the Dean College of Medicine. This shall be mapped with the rotation course outline, learning objectives, common morbidity and mortality for the region; and available cases.

The cases shall be classified as:

Procedural

- Observed (O) – Seen during bedside teaching or rounds. Numbers may include those under (A) and (P). (See below)
- Assisted (A)
- Performed (P) - basic clinical skills all physicians should be competent and confident in

such as incision and drainage usually seen in the minor OR ambulatory setting.

Non-Procedural

- Observed (O) – Seen during bedside teaching or rounds. Numbers may include those under AP and M. (see below)
- Active Participation (AP) – clerk’s assigned patient with history, PE, progress notes and discharge summary done by clerk. Ambulatory (OPD) patients are not included.
- Co-Managed/Managed - (M) - usually Ambulatory (OPD) patients with simple cases or follow-up patients

Clerks who do not fulfill the minimum case requirements in a given rotation shall need to submit clinical case study (i.e.) pertaining to the deficient case/procedure.

Number of cases will vary slightly from rotation to rotation depending on the frequency of complex cases in that rotation.

Clinical Documentation

Students are required to complete the following paperwork: Logbook, Case Write-Up, Student Evaluation of Faculty, and Student Evaluation of Clinical Rotation. Logbooks and case write-ups should be original documents, contain all preceptor signatures, and be legible and organized. Additionally, the preceptor also does a mid and end evaluation of the student based on observations during the rotation.

Attendance

Students are required to maintain an attendance log which will be signed by the preceptor every day of the rotation.

Personal Log (Log sheet)

The student is required to maintain a logbook denoting the activities of each day of clerkship and must be signed by the physician who is supervising the activity; activities include, but are not limited, to history taking, physical examination, didactic activities like seminars, lectures or case conferences, or other patient care activities. Students are asked to record patient information, diagnoses, and procedures, whether observed or performed. The logbook is intended as a guide for recording what practical experience was gained during the clerkship and must be signed by the preceptor.

Case Report

Students shall submit 1 case report for each core and 3 cases report out of the selected Elective. Total of 9 Case report should be submitted. The cases should be evaluated by the assigned preceptor attaching their signature. The Cases should be submitted together with all the clinical documentation and logbooks.

Mid Rotation Evaluation

The student is required to meet with their preceptor for a performance review mid-way through the clerkship. The preceptor must complete and sign a Mid-Clerkship Performance Evaluation.

Clerkship Performance Evaluation

Towards the end of the rotation, preceptors are required to complete a final Clerkship Performance Evaluation for each student

Student Evaluations

Each student is required to complete clerkship and preceptor evaluation forms towards the end of the rotation. Students will be assigned to the online evaluation forms which needs to be completed prior to the start of the next rotation.

Completion & Submission of Documents

Students are required to complete and submit the all the clinical documentation within five (5) days of completion of the end rotation exam.

Logbooks shall not be accepted in the following instances:

1. Incomplete assessments or without signatures
2. Tampered or spurious logbooks
3. Falsified records, signatures

Clinical Exam

End Rotation Exam

At the end of each core rotation, there will be an End Rotation Exam (ERE). The components of the ERE are:

1. Theoretical exam (NBME subject shelf): All clinical students must take the end rotation NBME theoretical exam after completion of each core rotation.
2. Objective Structured Clinical Exam (OSCE): Clinical students must take OSCE for each core rotation based on the specialty to complete the rotation.
3. Clinical Evaluation: This reflects the student's actual performance in the ward, and it consists of the following: History taking, physical examination, clinical presentation, procedural skills, clinical judgment, communication skills and bedside manner.

The final grade for Clinical Rotations will be based on the following:

- End-Rotation NBME clinical shelf: 40%
- OSCE: 40%
- Clinical Evaluation (Direct Observation): 20%
- If any student fails in 1st attempt in ERE – Theory, the student must repeat the exam without having to go to the wards.
- If any student fails in 1st attempt in ERE - OSCE, the student has to repeat the OSCE after completing part of the rotation with hospital posting.
- Students will be given three attempts to pass the NBME shelf exam and the ERE OSCE post which students will be recommended for dismissal from the program.

Clinical Exit Exam

All MD students of TAUCOM are required to pass the Clinical Exit Exam to complete the MD program.

This exam has two components.

- Objective Structured Clinical Exam (OSCE) – 50%
- NBME Comprehensive Clinical Science Examination (CCSE) - 50%

The student has to secure 70% or higher grade to pass the Clinical Exit Exam. The grade will be given as PASS or FAIL.

Clinical Exit Exam Promotion Policy

- Students will be allowed three attempts to pass the Clinical Exit Exam within a 12-month time period. This one year is counted as the time elapsed between the date on which the results of the first attempt and the third attempt were received.
- Students who fail the Clinical Exit Exam on three occasions will be recommended to the Dean by Student Promotions and Graduation Committee (SPGC) for possible dismissal from the MD program.
- To qualify for USMLE Step-2 certification students are required to pass the NBME CCSE examination. The maximum academic leave approved by the school to write USMLE Step - 2 is six months

Absence from Exam

Any student who does not attend an examination will be deemed to have an unexcused absence from that examination and will receive a grade '0' (Zero) for the exam, unless:

- The student has become ill or injured: In such cases students must provide an official medical certificate from a medical practitioner. Students who are ill or injured immediately prior to the examination and thus unable to study effectively will also be granted an excused absence provided appropriate medical certification is available and a request is made to the Deans office
- The student has a family emergency: This will be deemed as a legitimate excuse as long as the emergency is verifiable by telephone and in writing.
- Due to a major family emergency or illness/injury requiring hospitalization: The student will receive an "Incomplete" grade for the course.

Licensing Exams

Caribbean Association of Medical Councils' Registration Exam (CAMCE)

The Caribbean Association of Medical Councils (CAMC) administers an examination for trained medical practitioners who wish to practice within the contributory CARICOM Member States. Successful completion of this examination fulfills the criteria for registration by Member Councils of CAMC and is necessary to practice in most CARICOM Member States. Potential candidates for this examination include Graduates with undergraduate medical degrees from medical schools, which are not recognized by CAMC.

Aims of the CAMC Examination:

The CAMC examination aims to assess for registration purposes, the general body of medical knowledge and clinical skills of trained doctors whose basic medical qualification are not recognized by the regional Medical Councils, i.e., doctors trained in medical schools that have not been formally reviewed and accredited by CAMC. The successful candidate is registered to engage in safe, independent general practice throughout the Caribbean. It aims to provide a regional basis for ensuring standards for the profession.

*Please Note: "The permission for Independent Practice is governed though by the rules of Member Councils."

Objectives of the CAMC EXAMS:

The standard of the CAMC examinations is defined as the level of attainment of medical knowledge, clinical skills and attitudes required of newly qualified graduates of accredited medical schools who have intern training. The potential candidates are expected to complete:

1. Demonstrate knowledge and skills for diagnosis and treatment of diseases and application of this knowledge to solving problems presented by the patient.
2. Demonstrate good oral and written communication skills.
3. Demonstrate an effective team approach to health care.
4. Demonstrate competence in common procedural skills
5. Recognize his (or her) own limitations and seek collaboration and consultation when necessary.

The CAMC Examinations:

The CAMC examinations consist of two components:

The multiple-choice examination is a test of the principles and practice of medicine in the disciplines of internal medicine, pediatrics, surgery, obstetrics, gynecology, community health, and psychiatry. The MCQ is in two parts (morning and afternoon sessions) each of three (3) hours duration.

Each part contains 100 questions. The MCQ examination is held over one (1) day, simultaneously at approved centers in the Caribbean.

The Clinical Examinations evaluate clinical competence in terms of medical knowledge, clinical skill and professional attitudes for the safe and effective clinical practice of medicine in the Caribbean region. The Clinical examination will consist of a multi-station structured clinical assessment of clinical skills. Disciplines covered include Medicine and surgery, obstetrics and gynecology, pediatrics, community health, and psychiatry. Only those candidates who are successful in the written component of the examination (MCQ) will qualify to proceed to the clinical component.

The Examinations are designed as a comprehensive test of medical knowledge, clinical competency, and performance. Both MCQ and clinical assessments are multidisciplinary and integrated.

The MCQ examination focuses on essential medical knowledge involving an understanding of the disease process, clinical examination, diagnosis, investigation therapy management, as well as on the candidate's ability to exercise discrimination judgment and reasoning in distinguishing between the correct diagnosis and plausible alternatives. The clinical examination also assesses the candidate's capacity to communicate with patients, their families, and other health workers. The Examinations are currently conducted bi-annually (April/May and October/November). Candidates wanting to participate in the examinations must register at least six weeks prior to the written examination date.

The range of topics covered in the CAMC examination is based on approved clinical curricula with an emphasis on common conditions in the Caribbean community. The CAMC curriculum is available from the CAMC Office. Review courses on pertinent subject areas may also be conducted by Independent Clinical Bodies and these are available based on the demand. The CAMC's Board of Examiners ensures that the format and content of the CAMC examinations are consistent with undergraduate medical courses and the standard of examinations in accredited medical schools. Members of the Board have broad expertise over the full range of disciplines covered in the CAMC and medical school examinations.

United States Medical Licensing Examination (USMLE)

The United States Medical Licensing Examination (USMLE) has four parts, leading to licensure. The **USMLE Step 1: Students are eligible to take USMLE Step 1** after the completion of the Basic Sciences, including the transition semester.

USMLE Step 2 Step 2 CK assesses an examinee's ability to apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision and includes emphasis on health promotion and disease prevention. Students are eligible to take step 2 upon completion of all the core and elective rotations.

To meet the clinical and communication skills requirements for ECFMG Certification, eligible IMGs can use the Pathways. The Pathways allow qualified IMGs to continue to pursue ECFMG Certification and to compete for positions in U.S. graduate medical education (GME), while providing assurance to the public and U.S. GME programs that IMGs are ready to enter supervised training. The step 2 program and ECFMG certification has been changing since the pandemic and most up to date information can be available from the ECFMG website and from the below link on various pathways.

<https://www.ecfm.org/certification-requirements-2023-match/#thepath>

USMLE Step 3, the final step for licensure, is taken after graduation, during, or at the conclusion of residency training.

Students are required to obtain a passing score in NBME CBSE or CCSE to be eligible for USMLE step 1 and Step 2 certifications. Please contact the office of the registrar for more information on licensing exam and procedures.

For more information on USMLE Exams and ECFMG certification process please visit USMLE.org

ECFMG Certification: To be eligible for ECFMG Certification, international medical graduates (IMGs) must satisfy a number of requirements, including the medical science examination requirement, the clinical skills requirement, and the communication skills requirement. Step 1 and Step 2 Clinical Knowledge (CK) of the United States Medical Licensing Examination® (USMLE®) are the exams currently administered that satisfy the medical science examination requirement.

To meet the clinical and communication skills requirements for ECFMG Certification, eligible IMGs can use Pathways. Students are informed to seek information from ECFMG website for more information on pathways as there are frequent updates.

Foreign Medical Graduate Examination

FMGE is a screening test for medical graduates to be eligible to practice medicine in India. Which is also known as MCI Foreign Medical Graduates Examination (FMGE) is a qualifying exam conducted by the National Board of Examination (NBE) in India

The candidate who are appearing for the exams must be an Indian national or an Overseas Citizen of India (OCI) Qualification: The candidate should possess a primary medical qualification, which is confirmed by the Indian Embassy concerned. The test is one of the mandatory requirements for an Indian citizen who has a medical degree from a college outside India to practice medicine in the country.

This examination is held twice in year in June and December on the third Monday and Tuesday of the month. Candidates have to score at least 150 marks out of 300 to pass FMGE.

Career and Residency Counselling

The Career counselling for TAUCOM students is available both in formal and Informal format at multiple levels during the entire MD program.

FORMAL PROCESS:

MD1:

When the students enter the MD program, counselling is provided to them in terms of the following:

- Types of rotations available to them
- Career goal options available to them for doing residency and practice
- Exams they have to clear to achieve that goal

End of MD4 (Transitional Semester)

- During the 8-week Transitional Semester at the end of MD4 and successful completion of Basic Science Exit Exams, MD students are again provided with career counselling in terms of rotation choices available to them.
- Also, during the Transitional semester, clinical faculty from each specialty are interacting with them discussing the highlights of that particular specialty.

End of MD6:

After completion of Core Rotations, when the students are going to apply for elective choices, they are provided with counselling by the Associate Dean via One-on-One sessions to discuss the elective rotations they should apply for based on their interest and career choices.

End of MD8:

Career and residency counselling is provided at the end of successful completion of the program regarding the following:

- Career options available: whether they would like to practice in US, India or Caribbean region. Depending on their choice, information is provided accordingly
- Residency prerequisites: Based on the residency choice, information is provided in terms of prerequisites, research options, application form and recommendation letters
- Licensure Exam: TAUCOM has information packages on the major License exam such as CAMC I and II, USMLE I and II and FMG (India). These information packages have information regarding the documents needed, dates, materials to be covered and other support materials.

Students can pick a specific package or all the packages if they want to appear in all of them.

INFORMAL PROCESS:

Besides the formal counselling available at specific times during the program, there are individuals identified to provide the counselling regarding career or residency or rotations to any student. These “counsellors” have a background and experience in that particular region and include the following:

- Hugh Duckworth, MD: for USA Career choice and process
- Dheeraj Bansal, MD MPH: for India career choices and process
- Sheik Amir, MD FRCS: For Guyana and Caribbean career choices and process.

Direct Observation Policy

Direct observation is defined as an assessment based on the live performance of a medical trainee's clinical skills that is designed to provide feedback on skills essential to the delivery of high-quality clinical care. Texila American University strives to create a learning environment that seeks to fulfill the potential of all of its students.

This policy is intended to provide a clear statement of the University's standard of conduct for the Direct Observation of core clerkships and electives. The content of this policy is in keeping with the values and goals of the Accrediting bodies & TAUCOM. These policies should be used to inform and guide the day-to-day aspects of teaching and learning.

TAU-COM is committed to fostering a positive environment that promotes academic and professional success in teachers and students at all levels within the University. The attainment of such success is dependent on an environment where individuals are seen exclusively faculty participating in core clerkships must conduct direct observation of medical students during clinical encounters with patients for the purpose of performing student assessments, providing feedback and determining that defined clinical objectives have been met by each student.

Direct Observation Requirements and Procedure.

- TAU-COM faculty participating in core clerkships must conduct direct observation of medical students during clinical encounters with patients for the purpose of performing student assessments and providing feedback.
- During clinical encounters, faculty members must directly observe part or all of the clinical competencies as history taking, physical examination, clinical judgment, procedural skills, patient care, and laboratory – imaging correlation, clinical presentations, bedside manners, professional attitude and behavior.
- Faculty members must document the direct observation utilizing the rubrics for each clinical competence and formative assessments.
- Completed clinical competence grade sheets must be submitted by clinical HOD and to be incorporated to end rotation course evaluation.
- The direct observation happens daily under the guidance of clinical HOD/clinical preceptor.

Documentation of Clerkship Completion

Completion of clerkship requirements will be affirmed through clinical competence grade sheets, containing the original signatures of faculty members responsible for determining that defined clinical competencies have been met by each student.

Responsibilities

This policy requires collective supervision by all current clinical HOD in the TAU-COM. Clinical HOD is responsible for ensuring that direct observation is taking place, and for informing the Assistant Dean clinical affairs, and forward it to Associate Dean for clinical affairs, if any issues that may impede full compliance with this policy.

Procedures for Review

Associate Dean for clinical affairs office

- At the mid and end of each rotation, the clinical faculty/preceptor evaluates students' clinical competence, skills and knowledge. The results are provided within 3 working days to clinical HODs identifying students who have not received feedback. Clinical

HODs work with the faculty to ensure an evaluation is scheduled prior to the end of the clerkship.

- At the end of each rotation, the Associate dean for clinical affairs surveys students on whether they have received direct observation. All non-compliance is reviewed by relevant program evaluation committee corrective action may be levied in accordance with this policy as described in the Compliance section below.
- Schedule for Review and Update

This policy may be reviewed and revised as necessary, but at least every five years.

Stakeholder Compliance

On a term basis, compliance results for all clerkships are summarized by the program evaluation committee and submitted to the Executive Curriculum Committee. The Executive Curriculum Committee acts upon these data and approves remediation actions to be taken. Clinical HODs are expected to conduct root-cause analysis to remove barriers, as needed.

Actions that may be taken by the Clinical HODs against faculty members who repeatedly fail to conduct direct observations in accord with this policy, including remediation, reassignment of teaching responsibilities, and documenting “failure to meet expectations” in such faculty members’ annual faculty evaluations.

Remedial Policy

Purpose of Policy:

This policy is for the students who fail one of the following:

- ERE OSCEs
- ERE Theory
- ERE Competency

Definition of Remedial Rotations:

Failed OSCE, Competency, or ERE Theory or a combination of these exams.

Remedial Guidelines:

- The remedial rotations for students who failed will have different guidelines instead of normal duties in the hospital.
- The remedial will be more focused on the weaknesses of the students.
- In the case of a student failing EREB OSCE, the clerk shall be scheduled for remedial rotation in remedial slots (6 weeks for IM and Surgery; 4 weeks for other cores)
- In case of failing ERE Theory, the student can retake the exam without remedial rotations. However, three consecutive failures of ERE Theory would require the student to return for remedial rotation in the remedial slot
- In case of failing a competency, the student will have to retake a 4-week remedial rotation

Other Guidelines:

- Students will be placed in a classroom setting (A clinical office will be available to be used as a classroom or doctor’s office)
- Students will be taught based on focusing on their weaknesses
- Classes will be 2 – 3 hours per week
- A repeat of the rotation shall be in the next available slot.
- Student Counselling is mandatory for repeat rotators by the ADCA or Dean COM

- Attendance is a must for a student and should have 100% attendance
- Late joiners in any rotation are bound by the 90% rule.
- Attendance from the lecturer should be provided
- The preceptor will assess if the student is capable to take the failed examination
- HOD will decide who will be the assigned preceptor to the students, preferably from the faculty who failed the student

Core:

- General Surgery – Maximum of 18 hours for 6 weeks
- Internal Medicine - Maximum of 18 hours for 6 weeks
- Pediatrics – Maximum of 12 hours for 4 weeks
- OB-GYNM - Maximum of 12 hours for 4 weeks
- Psychiatry - Maximum of 12 hours for 4 weeks
- Family Medicine - Maximum of 12 hours for 4 weeks

Attendance Guidelines for remedial rotations:

- Taking and updating of clerk's attendance falls under the purview of the Clinical preceptor(s)/faculty and the Clinical Head of Departments
- Attendance must be taken within 15 minutes at the onset of didactic classes or activity.
- Clerk coming in after 15 minutes from stipulated time shall be marked absent, but is required to attend the remaining time allotted
- A random attendance may be taken at the Clinical Preceptor/Faculty, HoD, Associate Dean for Clinical Affairs and/or her/his representative's discretion. When student is not present for whatever reason. S/he shall be marked absent.
- A mandatory attendance of 90% is required to be eligible for End-Rotation Exams

Absences – Clinical Students (including remedial students)

Suspensions pertaining to absences of clinical students need not go through the Disciplinary Committee and shall be meted out by the Registrar's Office on the advice of the Associate Dean for Clinical Affairs (ADCA) /Dean COM.

- Eight days or more cumulative absence in a twelve-week rotation – **REPEAT ROTATION**
- Five days or more continuous absence in a twelve-week rotation – **REPEAT ROTATION**, with a one-week suspension
- Six days or more cumulative absence in an eight-week rotation – **REPEAT ROTATION**
- Four days or more cumulative absence in an eight-week rotation – **REPEAT ROTATION**
- Four days or more cumulative absence in a six-week rotation – **REPEAT ROTATION**
- Three days or more continuous absence in six-week rotation – **REPEAT ROTATION**, with one-week suspension
- Three days or more cumulative or continuous absence in a four-week rotation – **REPEAT ROTATION**

Clerks with excused absences shall apply directly with supporting documentary evidence to their respective Clinical HoD. Elevation to Clinical Dean through the Clinical Administrators is initiated and Department of Student Affairs advised. Settling of discrepancies or issues regarding Clinical Students shall be within the purview of the ADCA/Dean COM.

Appendix 1. Internal Medicine Syllabi

Clerkship Objectives

At the end of the clerkship the student should be able to:

1. Identify the nature and extent of various health problems and medical diseases/disorders
2. Demonstrate a holistic approach towards a patient and evaluate each patient as a person and not merely a collection of symptoms and signs.
3. Develop the art of medicine involving communication with patients and relatives, demonstrate empathy, humane attitude and understand the importance of doctor-patient relationship in providing medical care at all levels, recognizing the need for confidentiality in all dealings.
4. Elicit a complete clinical history from the patient and/or attendant, perform a thorough general physical examination, interpret findings, have a rational approach to investigations and outline the principles of treatment.
5. Be able to perform common bedside procedures
6. Appreciate the impact of illness and loss of well-being on the individual with implications for the family and the community.
7. Recognize and initiate treatment of life-threatening medical emergencies,
8. Practice rational drug use and institute appropriate measures for adverse drug reactions with proper notification.
9. Be aware of the common medical problems complicating pregnancy. Similarly, recognize the implications of aging on health.
10. Interpret mortality and morbidity data and be able to plan a strategy to deal with an epidemic.
11. Outline the principles of management of medico-legal problems and discharge statutory obligations of a registered medical practitioner.
12. Learn to adapt to new ideas and situations optimizing patient care in resource-constrained environments.
13. Demonstrate an understanding of ethical and legal implications of his medical decisions.

Learning Outcome

Clinical Students should have a firm grasp of the following BASIC CONCEPTS:

Prerequisites

- Temperature regulation
- Physiology of respiration
- Normal and abnormal heart sounds.
- Pathophysiology of anemias
- Pathophysiology of shock.
- Formation of urine.
- Physiology of micturition.
- Fluid and electrolyte balance.
- Regulation of gut motility.
- Liver function tests.
- Surface anatomy of liver and spleen.
- Anatomical distribution of Lymph nodes.
- Nutrition and metabolism.
- Cerebral circulation.
- Physiology of cerebral, cerebellar and vestibular systems.
- Concept of upper and lower motor neuron lesions.
- Locomotor system
- Neural Electrophysiology
- Acid Base Balance.

Topics

A. Common symptoms and Signs of Disease

1. Pain
2. Fever
3. Cough expectoration and hemoptysis.
4. Dyspnea, tachypnea and orthopnea.
5. Cardiac murmurs: functional and organic.
6. Pallor and Cyanosis.
7. Hemorrhage, shock and cardiovascular collapse.
8. Common urinary symptoms including dysuria, oliguria, nocturia, polyuria, incontinence and enuresis.
9. Edema and anasarca.
10. Anorexia, nausea and vomiting.
11. Constipation, diarrhea and dehydration.
12. Hematemesis, melena and hematochezia.
13. Jaundice and hepatomegaly.
14. Enlargement of lymph nodes and spleen.
15. Abdominal swelling and ascites.
16. Obesity, weight loss and weight gain.
17. Fainting, syncope and seizures.
18. Headache, dizziness and vertigo.
19. Disorders of movement and gait.
20. Paresis and paralysis.
21. Coma and disturbances of consciousness.
22. Joint pain, backache and pain in the extremities.

B. General Topics

1. Fluid and electrolyte disturbances.
2. Acid-base disturbances.

Objectives

- At the end of the unit the student should be able to:
- Demonstrate a rational clinical approach to the patient with regard to the art of medicine, doctor-patient relationship, communication skills and the need for confidentiality.
- Elicit relevant signs on physical examination.
- Recommend diagnostic tests based on the interpretation of clinical history and physical findings.
- Outline principles of management
- Maintain a comprehensive case record of the patient's complaints, all relevant findings, investigations and the line of management.

RESPIRATORY SYSTEM

Prerequisites

- Pulmonary Function Tests.
- Sputum examination.
- Common micro-organisms of the respiratory tract.
- Gram staining and ZN staining.
- Pharmacology of antituberculosis drugs, bronchodilators, antitussives, antihistamines
- Hazards of smoking.
- Pathology of pulmonary neoplasms.

Topics

1. Tuberculosis
2. Acute upper and lower respiratory infections
3. COPD and core pulmonale
4. Acute respiratory distress.
5. Naso-bronchial allergies.
6. Suppurative lung disease
7. Pleural diseases - pleural effusion, empyema and pneumothorax.
8. Neoplasms of the lung.
9. Common occupational lung diseases.

Specific Objectives

- At the end of the unit, the student should be able to:
- Describe the clinical features, correlate them with pathophysiology, arrive at a logical diagnosis and outline principles of management of the following common respiratory diseases - URI, pneumonias, pulmonary tuberculosis, bronchial asthma, acute and chronic bronchitis, pleural effusion, cor pulmonale, bronchiectasis, bronchogenic carcinoma, lung abscess and respiratory failure.
- Diagnose and initiate treatment for the following respiratory emergencies: Hemoptysis, pneumothorax and acute severe asthma and acute respiratory distress due to other causes.

- Diagnose, provide initial treatment and refer uncommon and complicated cases of lung collapse, neoplasms of lung, interstitial lung diseases and common occupational lung diseases.
- Interpret x-ray chest and sputum reports with reference to common respiratory diseases.
- Recommend appropriate pulmonary function tests.

CARDIOVASCULAR SYSTEM

Prerequisites

- Anatomy and physiology of cardiovascular system.
- Pathophysiology of cardiovascular diseases.
- Pharmacology of drugs acting on cardiovascular system
- Microorganisms involved in rheumatic fever, rheumatic heart disease and infective endocarditis.

Topics

1. Rheumatic fever and rheumatic heart disease, Infective endocarditis
2. Hypertension and hypertensive heart disease.
3. Coronary artery disease.
4. Acute and chronic heart failure.
5. Common congenital heart diseases in adolescents and adults: ASD, VSD, PDA, TOF and coarctation of aorta
6. Common cardiac arrhythmias.
7. Acute and chronic pericarditis, pericardial effusion and cardiac tamponade. Cardiomyopathies.
8. Common aortic diseases, peripheral vascular disease: arterial and venous.

Objectives

- At the end of the unit the student should be able to:
- Describe the clinical features, correlate them with pathophysiology, arrive at a logical diagnosis and outline principles of management of the following common diseases:
- Rheumatic fever and RHD, Infective endocarditis, common congenital heart diseases (ASD, VSD, PDA, TOF, Coarctation of aorta), coronary artery disease, congestive cardiac failure, hypertension, pericarditis, pericardial effusion and common cardiac arrhythmias
- Diagnose and initiate treatment for the following life-threatening cardiac emergencies: acute pulmonary edema, acute MI, cardiogenic shock, thromboembolism, cardiac arrest and cardiac tamponade,
- Diagnose, provide initial treatment and refer cardiomyopathies, myocarditis, uncommon congenital heart diseases, aortic aneurysms, syphilitic cardiac complications and peripheral vascular diseases appropriately.
- Interpret EKG, x-ray chest and echocardiographic findings with reference to common cardiovascular diseases.

GASTROINTESTINAL TRACT

Prerequisites

- Anatomy of the GIT.
- Physiology of GI secretions and motility.
- Physiology of digestion and absorption.
- Pathology of inflammatory and neoplastic disorders of GIT.

- Pharmacology of drugs acting on the GIT.
- Microbial pathogens of GIT.

Topics

1. Diarrhea and dysentery.
2. Helminthiasis.
3. Food poisoning.
4. Constipation.
5. Malabsorption syndromes.
6. Acid peptic disease/GERD.
7. Tuberculosis of the GI tract.
8. Enteric fevers.
9. Upper and Lower GI bleeding.
10. Acute abdomen.
11. Intestinal obstruction.
12. GI malignancies.
13. Inflammatory bowel disease (Ulcerative colitis and Crohn's disease)
14. Functional disorders of the gut (Irritable bowel disease)

Objectives

- At the end of the unit the student should be able to:
- Describe the clinical features, correlate them with pathophysiology, arrive at a logical diagnosis and outline principles of management of the following common GI diseases: Acute appendicitis, diarrhea, helminthiasis, abdominal tuberculosis, enteric fever, ulcerative colitis, upper and lower GI malignancies, acute intestinal obstruction, upper and lower GI hemorrhage.
- Diagnose and provide primary care and refer them for special investigations - ulcerative colitis/Crohn's, malabsorption syndrome, peptic ulcer, upper and lower gastrointestinal malignancies.
- Counsel the individual, family and the community about prophylaxis measures.
- Interpret the results of stool examination, endoscopy and common radiological procedures with reference to common gastrointestinal diseases.

HEPATO-BILIARY SYSTEM AND PANCREAS

Prerequisites

- Anatomy of hepato-biliary system and pancreas
- Functions of the liver
- Liver function tests
- Etiopathogenesis of hepatitis, cirrhosis, cholecystitis and tumors of the liver and pancreas
- Microbes causing hepatitis
- Metabolism of drugs in the liver
- Hepatotoxic drugs
- Exocrine-pancreatic function tests

Topics

1. Hepatitis: infective/autoimmune
2. Jaundice

3. Cholecystitis
4. Cholelithiasis
5. Pancreatitis
6. Cirrhosis
7. Liver abscess
8. Portal hypertension
9. Liver failure
10. Ascites
11. Hepato-biliary and pancreatic malignancies
12. Alcoholic liver disease
13. Primary/ secondary tumors of the liver and hepatobiliary tree

Objectives

At the end of the unit the student should be able to:

- Describe the clinical features, correlate them with pathophysiology, arrive at a logical diagnosis and outline the principles of management of the following common hepatobiliary and pancreatic diseases: Acute hepatitis (Viral, alcoholic and drug-induced); liver abscesses: pyogenic and amoebic, chronic liver disease, cirrhosis of liver, portal hypertension, and pancreatitis.
- Diagnose and initiate primary care management for life-threatening emergencies: variceal bleeding, acute pancreatitis, acute hepatic encephalopathy and acute cholecystitis.
- Diagnose, provide initial treatment and refer cases of malabsorption syndrome, cholecystitis, cholelithiasis, hepatobiliary, and pancreatic malignancies, and hydatid disease of liver.
- Counsel the individual, family and community on prophylactic measures.

NUTRITION

Prerequisites

- Energy and nutrient metabolism
- Nutritional requirements and sources.
- Balanced diet

Topics

1. Protein energy malnutrition (PEM)
2. Nutritional anemias
3. Iodine deficiency.
4. Hypo-and hyper- vitaminoses
5. Deficiencies of mineral and trace elements.
6. Obesity.
7. Hyperlipidemias.
8. Special diets.

Objectives

At the end of the unit the student should be able to:

- Plan and advice on nutritional requirements in adults in different states of health and disease.

- Diagnose common nutritional disorders in adults with special reference to PEM, nutritional anemias, Iodine deficiency disorders, vitamin deficiency and excess, osteomalacia and obesity.
- Counsel the individual, family and community regarding prevention of nutritional disorders.

METABOLIC, ENDOCRINE AND REPRODUCTIVE DISORDERS

Prerequisites

- Structure and functions of endocrine glands and reproductive system.
- Regulation of hormone synthesis and secretion.
- Etiopathogenesis of endocrine disorders.
- Pharmacology of drugs used in endocrine disorders.

Topics

1. Diabetes mellitus (Type 1 and Type 2).
2. Thyroid disorders.
3. Disorders of Pituitary.
4. Disorders of sex organs.
5. Adrenal gland disorders Cortex: (Cushing's & Addison's) and medulla (Pheochromocytoma)
6. Metabolic Bone disease.
7. Disorders of the parathyroid glands and calcium metabolism
8. Neuroendocrine tumors
9. Metabolic syndrome

Objectives

At the end of the course, the student should be able to:

- Describe the clinical features, correlate them with pathophysiology, requisition investigations, interpret and arrive at a logical diagnosis and outline principles of management of diabetes mellitus, hypo- and hyperthyroidism, IDD, Cushing's syndrome, Addison's disease, Acromegaly, Gout and metabolic bone disease.
- Diagnose and initiate primary care management of hypoglycemic and hyperglycemic coma.
- Diagnose and initiate primary care management and refer cases of Addisonian crisis, thyrotoxic crisis and myxedema coma.
- Describe the clinical features, diagnose and refer appropriately the cases of pheochromocytoma, dwarfism, gigantism, hypopituitarism, including Sheehan's syndrome, hypogonadism, impotence and loss of libido.
- Interpret lab reports of glucose tolerance test and other common tests performed for assessment of endocrine function.

HEMOPOIETIC AND RETICULOENDOTHELIAL SYSTEMS

Prerequisites

- Anatomical distribution of haemopoietic, reticuloendothelial and lymphoid tissues.
- Hemopoiesis.
- Hemostasis.

- Iron, folic acid and B12 metabolism.
- Etiology, classification and morphological features of anemias, Leukemias and Lymphomas.
- Performance of basic hematological procedures e.g., blood film, ESR, blood cross match
- Parasitic diseases associated with anemias.
- Heme metabolism.
- Drugs related to or causing hematologic disturbances.
- Pharmacology of hematinics
- Pharmacology of cytotoxic drugs.
- Principles of blood grouping and cross matching.

Topics

1. Anemias (nutritional, aplastic, sequestration, blood loss)
2. Leukemias.
3. Platelet disorders.
4. Polycythemia.
5. Lymphomas - Hodgkin's and Non-Hodgkin's
6. Bleeding disorders.
7. Lymphoreticular malignancies.
8. Disorders of the Immune system.
9. Blood transfusion and component therapy

Objectives

- At the end of the unit the students should be able to:
- Describe the clinical features, relate them to pathophysiology diagnose, treat and advise prophylactic measures for prevention of deficiency anemias, especially iron deficiency, folic acid and vitamin B12 deficiency anemias.
- Describe the clinical features, correlate them with pathophysiology, investigate, arrive at a logical diagnosis and outline the principles of management of common hemolytic anemias (Thalassemia, Sickle cell anemia, acquired hemolytic anemias), hypoplastic and aplastic anemias, agranulocytosis, bleeding and coagulation disorders, polycythemia, leukemias, lymphomas and porphyria.
- Describe the clinical features, investigate and diagnose immunocompromised states including that due to HIV infection.
- Diagnose, institute primary care management and refer the following emergencies: acute intermittent porphyria, acute hemolytic crisis, acute presentation of bleeding and coagulation disorders.
- Plan and undertake safe blood transfusion; outline concepts of transfusion and component therapy, indications for transfusion therapy, precautions to be taken, hazards of transfusion and safe handling of blood and blood products.
- Perform and interpret common hematological investigations.

FLUID-ELECTROLYTE AND RENAL DISORDERS

Prerequisites

- Structure and functions of the urinary system.
- Fluid and electrolyte balance.
- Acid base balance.

- Renal function tests.
- Pathogens of the urinary system.
- Immunopathology of renal diseases.
- Pharmacology of drugs used in urinary disorders.
- Nephrotoxic drugs.
- Urinalysis.

Topics

1. Acute and chronic glomerulonephritis.
2. Acute and chronic pyelonephritis.
3. Renal Failure.
4. Nephrotic syndrome.
5. Urinary tract infections.
6. Fluid and Electrolyte disturbances.
7. Acid-base balance.
8. Hematuria.
9. Renal calculi.
10. Renal malignancies.

Objectives

At the end of the unit the student should be able to:

- Describe the clinical features, correlate them with pathophysiology, arrive at a logical diagnosis and outline the principles of management of acute and chronic glomerulonephritis, nephrotic syndrome, UTI, acute pyelonephritis, acute renal failure and chronic renal failure.
- Identify the common causes, arrive at a logical diagnosis institute primary care treatment and refer patients presenting with hematuria, acute renal failure, dehydration, acidosis and alkalosis and renal colic.
- Outline the principles involved in peritoneal and hemodialysis. Enumerate the indications and possible complications of dialysis.
- Perform and interpret routine urinalysis.
- Interpret common lab reports on urine examination, blood gas estimations and serum electrolyte estimations.

CENTRAL NERVOUS SYSTEM

Prerequisites

- Cerebral circulation.
- Basic structures and connections of the central nervous system.
- Motor and sensory tracts and concept of upper motor neurons and lower motor neurons.
- Blood brain barrier and physiology of CSF.
- CSF analysis.
- Electroencephalogram (EEG)
- Bacteria and viruses causing meningitis and encephalitis.
- Pathogenesis of common CNS disorders.
- Pharmacology of drugs used in CNS disorders.

Topics

1. Migraine.
2. Meningitis.
3. Encephalitis
4. Poliomyelitis.
5. Cerebro-vascular accidents.
6. Seizure disorders.
7. Parkinsonism and movement disorders.
8. Gullian-Barre syndrome.
9. Peripheral neuropathies.
10. Paresis, paraplegia, hemiplegia and quadriplegia
11. Myasthenia Gravis.
12. Common muscular dystrophies.
13. Degenerative and demyelinating diseases.
14. Cord compression.
15. Intra-cranial space occupying lesions including brain abscess.

Objectives

At the end of the unit the student should be able to:

- Take a complete history pertaining to the CNS, assess the mental functional status, speech and level of consciousness in a fully conscious, semiconscious or unconscious patient and initiate primary care for patients with different levels of consciousness.
- Describe the clinical features relate them to pathophysiology, requisition relevant investigation, arrive at a logical diagnosis and outline the principles of management of: migraine meningitis, seizure disorders, cerebrovascular accidents, polyneuropathy, parkinsonism and movement disorders.
- Diagnose and institute primary care management for emergencies - cerebrovascular accidents, status epilepticus, coma, traumatic cord compression and acute neuropathies.
- Diagnose, provide initial treatment and refer the following: poliomyelitis, cord compression, intra-cranial SOL including brain abscess, encephalitis, myasthenia gravis, muscular dystrophies. Motor-neuron disease, other degenerative and demyelinating cerebral and cerebellar diseases.
- Interpret lab reports on CSF.
- Interpret radiological and other common investigations related to the nervous system.

MUSCULO-SKELETAL SYSTEM AND COLLAGEN VASCULAR DISORDERS

Prerequisites

- Anatomy of locomotor system.
- Mechanical and electrical properties of skeletal muscle.
- Immunopathogenesis of collagen-vascular diseases.
- Non steroidal anti-inflammatory drug (NSAIDs).
- Corticosteroids and other immunosuppressant drugs.

Topics

1. Rheumatoid arthritis.
2. SLE

3. Systemic sclerosis
4. Dermato-and polymyositis.
5. Osteoarthritis.
6. Tetanus
7. Vasculitides including giant cell arteritis, Takayasu's, polyarteritis nodosa, polyangiitis

Objectives

At the end of the unit the student should be able to:

- Describe the clinical features, correlate with pathophysiology, arrive at a logical diagnosis and outline the principles of management of rheumatoid arthritis osteoarthritis and SLE.
- Diagnose and initiate supportive measures and refer cases of dermato and polymyositis and acute presentations of vasculitides.
- Interpret common lab reports related to immune function.

INFECTIOUS AND TROPICAL DISEASES

Pre-requisites

- Epidemiology of communicable diseases.
- National Health Programs.
- Life cycles of Protozoa and parasites
- Anti-microbial drugs.
- Anti-helminthic drugs
- Basic concepts of immunization.

Topics

- | | |
|---|------------------------------------|
| 1. Malaria | 12. Leprosy |
| 2. Kala-azar | 13. Plague |
| 3. Filariasis | 14. HIV and AIDS |
| 4. Tuberculosis | 15. Rabies |
| 5. Enteric fever | 16. Snake and insect bites |
| 6. Amoebiasis and Giardiasis | 17. Brucellosis. |
| 7. Infectious hepatitis | 18. Helminthiasis. |
| 8. PUG | 19. Cysticercosis. |
| 9. Viral hemorrhagic fevers including dengue fever, Ebola | 20. Hydatid disease. |
| 10. Diphtheria | 21. Toxoplasmosis. |
| 11. Tetanus | 22. Pneumocystis carinii infection |
| 12. In adults. | 23. Immunization |

Objectives

At the end of the unit the student should be able to:

- Describe the clinical features, relate with pathophysiology, arrive at a logical diagnosis and outline the principles of management of the following: malaria, kala-azar, filariasis, tuberculosis, enteric fever, infectious hepatitis, PUG, viral fever including dengue fever, diphtheria, tetanus, leprosy, plague, HIV and AIDS, snake and insect bites, amoebiasis and giardiasis, brucellosis, rabies.

- Diagnose, and initiate primary care management for the following emergencies: cerebral malaria, tetanus, enteric encephalopathy, TBM, snake bites, diphtheria.
- Describe the clinical features, diagnose and refer cases of toxoplasmosis, PCP, hydatid disease, cysticercosis, rabies, tetanus, plague and leprosy.
- Counsel the individual, family and community regarding prophylactic and rehabilitative measures.
- Interpret common investigations related to infectious diseases.

POISONING, ENVIRONMENTAL AND OCCUPATIONAL DISORDERS

Prerequisites

- Common Poisons
- High-risk occupations.

Topics

1. Occupational lung diseases.
2. High altitude sickness
3. Motion sickness
4. Allergic disorders
5. Heat injuries
6. Cold injuries
7. Drowning
8. Radiation hazards.
9. Common poisonings:
 - a. Acute - rodenticide, pesticides, insecticides, corrosives
 - b. Chronic - Lead, Arsenic, Mercury
10. Smoking, alcohol and drug abuse.

Objectives

At the end of the unit the student should be able to:

- Describe the clinical features, correlate with pathophysiology, arrive at a logical diagnosis and outline the principles of management of common poisoning, Heat and cold injuries and motion sickness.
- Diagnose and initiate primary care for the following emergencies: Heat stroke, Hyperpyrexia, cold exposure, acute altitude sickness and severe allergic conditions.
- Diagnose, provide first-aid and refer complicated cases.

LEARNING EXPERIENCES

1. Didactic Lectures
2. Integrated Seminars*
3. Group discussions
4. Outpatient postings
5. Ward postings
6. Bed side case demonstration and/or discussion
7. Case presentation
8. Clinico-pathological exercises

9. Medical case studies

10. Demonstration of procedures and/or performance of procedures under supervision.

LIST OF SKILLS FOR MD

At the end of the programme the student should be able to:

- Obtain a proper relevant history, perform a humane and thorough clinical examination including internal examination (under supervision as per-rectal and per-vaginal) and examination of all organs/systems in adults.
- Use stethoscope, BP. apparatus, thermometer, weighing scales, percussion hammer, measuring tape, tuning fork, monofilaments and hat pins.
- Interpret biochemical laboratory values of common diseases.
- Interpret x-rays of chest and abdomen.
- Identify erroneous prescriptions and explain
- Interpret serological tests such as VDRL, ASTO, Widal, HIV, rheumatoid factor, hepatitis and TORCH infections.
- Interpret antimicrobial sensitivity reports.
- Interpret peripheral blood smear for common diseases.
- Write a complete case record with all necessary details.
- Adopt universal precautions for self-protection against HIV and hepatitis and counsel patients.
- Organize and carry out investigation of an epidemic and institute corrective/preventive measure.
- Record visual acuity.
- Perform lumbar puncture.
- Catheterize bladder in both males and females
- Prepare ORS
- Advise dietetic management in different diseases.
- Provide first aid to patients with peripheral vascular failure and shock.
- Manage acute anaphylactic shock.
- Manage diarrhea /dysenteries; Assess dehydration; Prepare and administer oral rehydration therapy (ORT).
- Manage emergencies - drowning.
- Manage common poisonings.
- Interpret CBC results, CRP, ESR, RBC indices, platelet count
- Interpret stool exam for ova, cysts, and occult blood
- Interpret Gram's stain, Albert's stain, Ziehl - Nielsen or modified Ziehl Nielsen's stain.
- Record and interpret an ECG and be able to identify common abnormalities such as myocardial infarction and common arrhythmias
- Start IV line and infusion in adults.
- Give intradermal /SC/IM/IV injection.
- Perform CPR (Cardiopulmonary resuscitation)
- Manage acute severe bronchial asthma.
- Institute primary care for epilepsy and status epilepticus.
- Institute primary care for comatose patients regarding airway, positioning, prevention of aspiration and Injuries
- Manage hyperpyrexia

Rotation Schedule

	7-8	8-9	10-11	11-12	1-2	2-3	3-4	4-5	5-6
Monday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Admission Conference	OPD/Clinics	OPD/Clinics	OPD/Clinics	OPD/Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Tuesday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	OPD/Clinics	OPD/Clinics	Didactic Lectures	Didactic Lectures	Didactic Lectures	Didactic Lectures	SDL
Wednesday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Journal Club	Didactic Lectures	OPD/Clinics	Didactic Lectures	Didactic Lectures	SDL	Afternoon Endorsement Rounds & Ward Work
Thursday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	OPD/Clinics	OPD/Clinics	Discharge/Handover Conference	Didactic Lectures	Didactic Lectures	SDL	Afternoon Endorsement Rounds & Ward Work
Friday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Morbidity/Mortality	Didactic Lectures	Didactic Lectures	Didactic Lectures	OPD/Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Saturday	Ward Work	Ward Work							
Sunday	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call

Didactic Lecture

Week 1
Lecture
Basis ECG
Basis ECG
Arrhythmias
IHD (AMI/Angina)
Week 2
CCF
HTN
Hypertensive Crisis
Rheumatic Fever/Subacute Endocarditis
Week 3
Bronchial Asthma
COPD
Pneumonia
Pulmonary TB
Week 4
Acute Hepatitis
Chronic Hepatitis
Acute Pancreatitis
Chronic Pancreatitis
Week 5
PUD
Inflammatory bowel disease
Liver Cirrhosis
Liver Insufficiency
Week 6
Pyelonephritis
Renal Failure

Alkalosis Disorders
Acidosis Disorders
Week 7
Na/K disorders
Type I/II DM
Hypo/Hyperthyroidism
Diabetes Insipidus
Week 8
Cushing's/Addison Disease
Obesity/Dyslipidemia
Anaemias (Iron deficiency/Vit B ₁₂ deficiency)
SCD
Week 9
Lymphomas
Leukaemia's
Meningoencephalitis
CVA (Strokes)
Week 10
Seizures/ Epilepsy
Migraine
Guillain-Barre Syndrome
Common Endemic Infectious Disease I (Malaria and Dengue)
Week 11
Common Endemic Infectious Disease II (Leptospirosis)
Common Endemic Infectious Disease III (Typhoid Fever)
Another's Infectious Diseases (Zika and Chikungunya)
Week 12
Common Poisoning (Panadol, Organophosphate and Gramaxone)
Snake Bite
SLE

Advisable Minimum Cases

		Observed (O)		Active Participation		Co-Managed/Managed (M)	
	Non-Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Coronary Artery Disease & MI	5		5		5	
2	Primary Hypertension	5		5		5	
3	Heart Failure	2		2		2	
4	Reversible Obstructive Airway Disease (Asthma)	3		3		5	
5	COPD	2		2		2	
6	Respiratory Tract Infection	5		5		5	
7	GERD	5		5		5	
8	UGIB - Acute Gastritis/Peptic Ulcer Disease	5		5		5	
10	Metabolic Syndrome	5		5		5	
11	Diabetes Mellitus	5		5		5	
12	Obesity & NAFLD	2		2		2	
13	Cirrhosis & De-compensated Liver Disease	1		1		1	
14	WBC Neoplasm	1		1		1	
15	RBC Dyscrasias & Anemias	3		3		3	
16	Renal failure	1		1		0	
17	Nephrolithiasis, UTI & Acute Pyelonephritis	3		3		3	
18	Nephrotic Syndrome & Nephritides	1		0		0	
20	Cerebrovascular Diseases & CVA	5		5		5	
21	Seizure Disorder	2		0		0	
22	Autoimmune Disorder	1		1		1	
23	Atopic Disorders (excluding asthma)	5		5		5	
24	Dermatomycoses	5		5		5	
25	Substance Abuse	3		3		0	
		Observed (O)		Assisted (A)		Performed (P)	
	Procedures	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Lumbar tap	2		1		0	
2	Bone Marrow Aspiration Biopsy	1		1		0	
3	Foley Catheter Insertion	5		5		3	
4	Tracheal Intubation	5		5		0	
5	Gastric lavage	2		2		1	
6	Fine Needle Aspiration Biopsy	2		2		1	
7	Arterial Phlebotomy	2		2		1	
8	EKG Administration & Interpretation	5		5		5	

Appendix 2. General Surgery Syllabi

Clerkship Objective

At the end of the clerkship the student should be able to:

1. Identify common surgical problems and understand their surgical management.
2. Obtain a proper and relevant history from patients.
3. Perform general, systemic, and local examinations.
4. Arrive at a logical diagnosis and consider differential diagnosis.
5. Know the possible complications of the disease.
6. Requisite relevant, cost-effective investigations in order to establish the diagnosis and plan treatment.
7. Interpret laboratory Investigation results, skiagram of common surgical diseases.
8. Plan and institute treatment.
9. Employ life saving measures in life threatening conditions.
10. Develop habit of rational use of drugs including antibiotics.
11. Provide first aid and refer patients with complicated surgical problems to centers equipped to handle them.
12. Obtain informed consent for any examination / procedure.
13. Develop cordial attitude towards patients, colleagues and other staff.
14. Act In a manner befitting a doctor and communicate sympathetically while dealing with an incurable disease and/or a dead/dying patient.
15. Demonstrate leadership qualities, promote team spirit, and be able to play a meaningful role in disaster preparedness and management.
16. Adopt universal precautions for self-protection against HIV and hepatitis and counsel patients.
17. Give subcutaneous/IM/IV injections and start I.V. line and infusion
18. Implement sterilization and antiseptic measures.
19. Control external hemorrhage in Emergency.
20. Perform debridement, wound toilet, suturing, and different types of dressings.
21. Pass a nasogastric tube, administer enemas, and insert flatus tube.
22. Maintain airway, conduct cardio-pulmonary resuscitation, and provide first aid.

Learning Outcome

Pre-requisites

- Pathophysiology of inflammation, repair and shock.
- Physiology of acid-base and fluid electrolyte balance.
- Pathology of neoplasia.
- Common microbial pathogens and rational use of drugs

- Medico-legal aspects of burns and scalds

Topics

1. Shock
2. Fluid and electrolyte therapy including blood transfusion.
3. Burns
4. Tetanus
5. Gas gangrene
6. Swelling, Ulcer, Sinus. Fistula, lymphadenopathy.
7. Cellulitis, abscess, erysipelas, carbuncle
8. AIDS and hepatitis in surgical practice.
9. Principles of organ transplantation.

Objectives

At the end of the course the student should be able to:

- Diagnose and initiate primary management in different types of shock.
- Define burns and scalds
- Identify degrees of burns.
- Institute resuscitative measures & primary care of burns.
- Prevent complications of burns.
- Outline the principles of fluid and electrolyte imbalance in surgical cases
- Enumerate the indications and complications of blood transfusion
- Manage different types of wounds.
- Take preventive measures against tetanus and gas gangrene.
- Diagnose and outline the principles of management of tetanus and gas gangrene.
- Diagnose swelling, ulcer, gangrene, sinus, fistula and lymphadenopathy by history and physical examination.
- Outline the principles of management.
- Able to diagnose and manage cellulitis, abscess, erysipelas and carbuncle.

DISEASES OF LYMPHATIC SYSTEM, ARTERIES AND VEINS

Pre-requisites

- Gross anatomy and micro-anatomy of blood vessels and lymphatics.
- Concept of inflammation.
- Physiology of blood coagulation.

Topics

1. Lymphadenitis
2. Lymphomas

3. Lymphangitis
4. Lymphoedema
5. Arterial injury
6. Buerger's disease
7. Arterial occlusive disease
8. Thoracic outlet obstruction
9. Aneurysm
10. Varicose veins and ulcer
11. Deep vein thrombosis, superficial thrombophlebitis.

Objectives

At the end of the course the student should be able to:

- Take relevant history, conduct physical examination and elicit relevant physical sign in above conditions.
- Correlate the complaints and physical signs to arrive at a logical diagnosis with justification
- Consider the differential diagnosis.
- Requisition relevant investigation.
- Outline the principles of management.

BREAST & THYROID

Pre-requisites

- Anatomy of breast and thyroid, their relations, blood supplies and lymphatic drainages.
- Physiology of lactation.
- Thyroid function, synthesis of thyroxin and their control mechanism.

Topics

1. Breast abscess, mastalgia and nipple discharge.
2. Benign and malignant breast diseases
3. Developmental anomalies of breast and thyroid.
4. Thyroid disorders - Diagnosis, surgery and its complications. (Thyroglossal cyst, Goiter, thyrotoxicosis, thyroid cancer and thyroiditis)

Objectives

At the end of the course the student should be able to:

- Diagnose common surgical conditions associated with breast and thyroid swelling.
- Correlate the clinical features with pathophysiology of thyroid disorders.
- Request specific investigations relevant for breast and thyroid diseases.
- Outline the principles of management of common disorders of breast and thyroid.
- Describe epidemiology and prevention of goitre
- Identify and enumerate possible complications of thyroid swelling including those following surgery.

- Prescribe antithyroid drugs; identify their toxic and side effects

CHEST

Pre-requisites

- Anatomy of chest wall, trachea-bronchial tree and pleura.
- Physiology of blood gas exchange

Topics

1. Chest injury, Pneumothorax, Hemothorax
2. Cardiac tamponade
3. Empyema
4. Lung abscess

Objectives:

At the end of the course the student should be able to:

- Diagnose and outline the principles of management in cases of chest injury, pneumothorax, hemothorax, empyema and lung abscess.
- Relieve tension pneumothorax.
- Request investigations relevant to the diseases.
- Outline the steps of chest tube insertion.

NEURO-SURGERY

Pre-requisites

- Anatomical layers of scalp, gross anatomy of brain and its coverings.
- Anatomy and surgical diseases of the spine and spinal cord.
- Blood supply of brain and spinal cord.

Topics

1. Head injury, malformations, meningocele, meningomyelocele, encephalocele

Objectives

At the end of the course, the student should be able to:

- control scalp bleeding
- Protect and immobilize spine in patients with head and neck injuries.
- Maintain airway and assess other injuries which may need priority.
- Describe the pathophysiology of head injury.
- Perform neurological examination, request relevant investigations and arrive at a diagnosis.
- Describe the clinical features of acute extra dural, sub-dural and intra-cerebral hematomas.
- Refer appropriately to specialists.

FACE, ORAL CAVITY AND SALIVARY GLANDS

Pre-requisites

- Anatomy of parotid, submandibular salivary glands and their relations.
- Surgical disease of the salivary glands.
- Gross embryology of development of face.
- Muscles of face, their nerve and blood supply and venous drainage.

Topics

1. Leukoplakia, submucous fibrosis
2. Ranula
3. Oral cancers (cheek, tongue, floor of mouth)
4. Cleft lip and cleft palate
5. Cysts and superficial tumors (sebaceous cyst, dermoid, lipoma, hemangioma), AV fistula of face and scalp.
6. Basal and squamous cell carcinoma of face
7. Preauricular sinus
8. Inflammation, abscess, tumor, calculus and fistula of salivary glands.

Specific Objectives

At the end of the course the student should be able to:

- Take relevant history, perform local examination and elicit relevant physical findings.
- Correlate the complaints and physical signs to arrive at a logical diagnosis with Justification.
- Consider the differential diagnosis.
- Outline the principles of management.

GASTROINTESTINAL SYSTEM

Pre-requisites

- Gross anatomy, blood supply, lymphatic drainage, nerve supply, congenital anomalies and functions of the esophagus, stomach, duodenum, intestines, appendix, rectum, anal-canal, hepato-biliary organs, portal venous system, pancreas & spleen.
- Peritoneal reflection in relation to the various abdominal viscera.
- Bilirubin metabolism and hepatobiliary function tests.
- Pathology of liver abscess, portal hypertension, gall stone, tumors of liver.
- Drugs used in gall stone disease
- Drug metabolism in liver
- Hepatotoxic drugs.

Topics:

Esophagus

Dysphagia, Corrosive burns

Stomach and Duodenum

1. Upper gastrointestinal bleeding
2. Acid-peptic diseases and its complications.
3. Gastric-outlet obstruction
4. Tumors of the stomach

Intestines

1. Intestinal obstruction in adults and children.
2. Intussusception
3. Congenital megacolon
4. Meckel's diverticulum
5. Diverticular diseases and polyposis
6. Intestinal amoebiasis
7. Typhoid and tuberculous ulcers
8. Malignant tumors of colon
9. Ulcerative colitis/Crohn's disease
10. Colostomy and ileostomy
11. Irritable bowel syndrome

Appendix

1. Acute appendicitis
2. Carcinoid tumor

Rectum

1. Proctitis
2. Carcinoma rectum
3. Rectal polyp
4. Prolapse

Anus & anal canal

1. Perianal abscess
2. Fissure
3. Hemorrhoid
4. Fistula in ano
5. Anal canal cancer
6. Anal wart

Peritoneum, mesentery, retroperitoneum & abdominal wall

Peritonitis	Retroperitoneal masses
Subphrenic abscess, pelvic abscess	Malignant ascite
Mesenteric adenitis and cysts	

HEPATO-BILIARY SYSTEM AND PANCREAS

Pre-requisite

- Obstructive jaundice
- Liver abscess, portal hypertension, liver tumors, hydatid cyst
- Acute cholecystitis, chronic cholecystitis, cholelithiasis and choledocholithiasis

- Tumors of gall bladder, bile ducts and pancreas.
- Acute and chronic pancreatitis

Spleen

- 1.Trauma of spleen
- 2.Splenomegaly.
- 3.Splenectomy - indications and complications.

Objectives

At the end of the course the student should be able to:

- Enumerate causes of dysphagia, their clinical features and complications.
- Outline the principles of management.
- Acute abdomen - causes, clinical features, investigations, diagnosis, treatment & complications.
- Take relevant history in cases of abdominal and retroperitoneal masses.
- Perform relevant clinical examination
- Correlate clinical features with pathophysiology to reach logical diagnosis with justification.
- Request relevant investigations.
- Outline the principles of management.
- Enumerate the causes of jaundice.
- Take relevant history of a patient having jaundice.
- Perform clinical examination and record the findings.
- Correlate clinical findings with pathophysiology in order to reach logical diagnosis with justification.
- Request relevant investigations.
- Outline the principles of management.
- Institute primary treatment.
- Define and enumerate the causes of Constipation & Intestinal Obstruction.
- Take relevant history, perform clinical examination, record the findings and correlate clinical features with pathophysiology in order to reach logical diagnosis with justification.
- Request relevant investigations.
- Outline the principles of management.
- Institute primary treatment
- Define upper and lower gastro-intestinal bleeding
- Institute resuscitative measures in emergency.
- Take relevant history, perform clinical examination and correlate clinical findings with pathophysiology to arrive at a logical diagnosis.
- Request relevant investigations.
- Outline the principles of management.
- Diagnose common chronic abdominal surgical conditions, order appropriate cost-effective investigations, arrive at a logical diagnosis and outline the principles of management.
- Diagnose common biliary conditions, order relevant investigations, interpret liver function tests, ultrasound, percutaneous transhepatic biliary drainage and ERCP, come to logical diagnosis and outline the principles of management.
- Diagnose common anorectal conditions, perform digital and proctoscopic examination and outline the principles of management.

- Enumerate the indications and complications of ileostomy and colostomy.

ABDOMINAL WALL AND HERNIAS

Pre-requisites

- Anatomy of the abdominal wall and their nerve & blood supply
- Anatomy of inguinal & femoral canals
- Pathway of testicular descent.

Topics

1. Ventral hernia
2. Umbilical sepsis and discharge
3. Inguinal hernia
4. Femoral hernia
5. Umbilical and paraumbilical hernia

Objectives

At the end of the course the student should be able to:

- Identify different types of hernia
- Enumerate the underlying predisposing conditions.
- Diagnose, outline the principles of management and complication of inguinal, femoral umbilical, paraumbilical, incisional and ventral hernias.
- Enumerate different causes of umbilical discharge.

GENITO-URINARY SYSTEM

Pre-requisites

- Development of kidney, ureter, bladder and external genitalia
- Anatomy of kidney, ureter, bladder and external genitalia
- Physiology of micturition
- Metabolism of uric acid and calcium
- The normal values of BUN creatinine and creatinine clearance

Topics

Renal Stones

1. Renal, bladder, prostate and testicular malignancy
2. Urinary retention
3. Painful testis
4. Hydronephrosis
5. Hematuria
6. Urinary tract infection
7. Polycystic kidney

8. Urinary tract injury
9. Scrotal and testicular swellings
10. Phimosis and paraphimosis

Specific Objectives

At the end of the course the student should be able to:

- Take proper history of genito-urinary system.
- Palpate the distended urinary bladder
- Examine kidney bimanually
- Perform rectal examination and describe the state of prostate.
- Correlate clinical findings with pathophysiology to arrive at a diagnosis.
- Obtain relevant history in patients with inguinal-scrotal swellings.
- Perform clinical examination, record physical findings and correlate with pathophysiology to arrive at a diagnosis.
- Diagnose, request relevant investigation and outline the principles of management of following conditions:
 - Congenital abnormalities of kidney, ureter, bladder and urethra.
 - Trauma of kidney, bladder and urethra.
 - Specific and nonspecific infections of kidney, bladder, testes and prostate.
 - Renal, ureteric, vesical and urethral calculi
 - Testicular and scrotal swellings
 - Undescended testes and torsion of testes
 - Benign enlargement of prostate.
 - Carcinoma of kidney, bladder, prostate, testes and penis.
 - Phimosis and paraphimosis
 - Obstructive uropathy.
- Enumerate the causes of hematuria, acute retention of urine and hydronephrosis and outline the principles of management.
- Describe the steps of circumcision, suprapubic cystostomy, hydrocoelelectomy and vasectomy

LEARNING EXPERIENCES

1. Didactic Lectures
2. Integrated Seminars
3. Group discussions
4. Outpatient postings
5. Ward postings

6. Bed side case demonstrations and/or discussions
7. Case presentations
8. Clinico-pathological exercises
9. Surgical case studies
10. Procedural demonstrations and/or performance under supervision.
11. Experience with Emergencies

Integrated Seminars

1. Thyrotoxicosis in pregnancy
 - Medicine
 - Surgery
 - Gynae
 - Pharmacology
2. Surgery in diabetes
 - Medicine
 - Surgery
3. Acute abdomen in pregnancy
 - Surgery
 - Gynae
4. Surgery in cardiovascular conditions
 - Pharmacology
 - Medicine
 - Surgery
5. Surgery in COPD patients
 - Physiology
 - Anesthesiology
 - Medicine
 - Surgery
6. Antimicrobial therapy in urinary tract, infection, upper infection, biliary tract infection
 - Microbiology
 - Surgery
 - Pharmacology

ASSESSMENT

Formative Assessment

1. Students will be assessed on a day-to-day basis.
2. Maintenance of a well-designed log book (during the period of posting in the discipline)

Summative Assessment

1. Theory examination.
2. Case presentation.
 - a. Long case
 - b. Short cases
3. Objective structured clinical examination (OSCE), including.

Interpretation of test items e.g., temperature chart, instruments, radiology, anatomical parts, pathological specimens (macroscopic and microscopic).

Rotation Schedule

	7 - 8	8 - 9	10 - 11	11 - 12	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
Monday	Morning Teaching/ Endorsement Rounds and Ward Work	Morning Teaching/ Endorsement Rounds and Ward Work	Admission Conference	OPD/ Clinics	Didactic Lectures	Didactic Lectures	OPD/ Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Tuesday	Morning Teaching/ Endorsement Rounds and Ward Work	Morning Teaching/ Endorsement Rounds and Ward Work	OPD/Clinics	OPD/ Clinics	Journal Club	OR	OR	Didactic Lectures	SDL
Wednesday	Morning Teaching/ Endorsement Rounds and Ward Work	Morning Teaching/ Endorsement Rounds and Ward Work	Pre-Op Conference	OPD/ Clinics	Didactic Lectures	Didactic Lectures	OPD/ Clinics	SDL	Afternoon Endorsement Rounds & Ward Work
Thursday	Morning Teaching/ Endorsement Rounds and Ward Work	Morning Teaching/ Endorsement Rounds and Ward Work	OPD/Clinics	OPD/ Clinics	Discharge/ Handover Conference	OR	OR	SDL	Afternoon Endorsement Rounds & Ward Work
Friday	Morning Teaching/ Endorsement Rounds and Ward Work	Morbidity / Mortality*	Morning Teaching/ Endorsement Rounds and Ward Work	OPD/ Clinics	Didactic Lectures	Didactic Lectures	OPD/ Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Saturday	Ward Work / On Call	Ward Work / On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call
Sunday	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call

*Tumor Board may be held in this slot on a twice a month basis

Didactic Lecture

Week 1
Lecture
Shock, Fluid & electrolyte therapy, blood transfusion.
Burns
Week 2
Surgical infections: Tetanus, Gas gangrene, Cellulitis, abscess, erysipelas, carbuncle, AIDS and hepatitis in surgical practice.
Week 3
Wound healing and management
Arterial, venous and lymphatic diseases and disorders
Week 4
Breast diseases
Thyroid disorders
Week 5
Chest trauma and diseases
Head injuries and raised intracranial pressure
Week 6
Maxillofacial disorders and trauma
Dysphagia and oesophageal cancer
Week 7
Peptic ulcer disease, gastric cancer and upper GI bleeding
Week 8
Intestinal obstruction, IBD, colon cancer
Appendicitis and carcinoid tumors
Week 9
Ano rectal cancers, perianal disorders
Abdominal trauma

Week 10
Biliary diseases and disorders, cholecystitis and gallstones
Pancreatitis and cancer
Week 11
Hernias
Hematuria, renal calculi, GU cancers
Week 12
Prostatomegaly / Prostate Cancer
Penile and scrotal disorders

Advisable Minimum Cases

		Observed (O)		Assisted (A)		Performed (P)	
	Major	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Explore Laparotomy / Exploratory	3		0		0	
2	Mastectomy	2		0		0	
3	Colorectal Cancer – Colectomy / Colostomy	1		0		0	
4	Gastric Surgery	1		0		0	
5	Splenectomy	1		0		0	
6	Hepatobiliary / Cholecystectomy	3		0		0	
7	Head & Neck Procedure	1		0		0	
8	Laparoscopic Surgery	1		0		0	
9	Adhesiolysis	1		1		0	
10	Amputation	2		2		0	
11	Thyroidectomy	1		0		0	
		Observed (O)		Assisted (A)		Performed (P)	
	Minor	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Appendectomy	2		1		0	
2	Cholecystectomy	2		1		0	
3	Excision/Incision Biopsy	3		1		1	
4	Hemorrhoidectomy	2		1		0	
5	Herniorrhaphy	3		1		0	
6	Wound Debridement	3		1		1	
7	Incision and Drainage	3		2		1	
8	Circumcision / Hydrocelectomy	2		1		1	
9	Hemostasis and Wound Suturing	5		2		1	
10	Medicolegal cases / Post Mortem	2		0		0	

Appendix 3: OB/GYN Syllabi

Clerkship Objectives

At the end of the clerkship the student should be able to:

1. Participate in all national health programs and policies related to reproductive health and safe motherhood.
2. Define terms commonly used in obstetrics and gynecology.
3. Demonstrate skills of history taking and performing obstetric and gynecological examination in order to arrive at a logical diagnosis.
4. Recognize clinical features of common obstetric and gynecological disorders correlate these with etio-pathology and institute primary management.
5. Diagnose pregnancy and provide antenatal, natal, post-natal and essential newborn care.
6. Identify high risk pregnancy, provide primary care and refer to appropriate medical centres.
7. Prescribe drugs judiciously during pregnancy and lactation.
8. Screen women for genital and breast cancer for early diagnosis and prevention.
9. Counsel and guide patients and family regarding illness, care, possible complications and prognosis.
10. Counsel couples and provide fertility regulation.
11. Acquire and practice communication skills required for taking informed consent and providing reproductive health care to women.
12. Handle medico-legal and ethical issues related to obstetrics and gynecology.
13. Diagnose and provide primary care of common obstetric and gynecological emergencies.

Learning Outcome

INTRODUCTION TO OBSTETRICS AND GYNECOLOGY

- Terms used in obstetrics, gynecology and fertility regulation
- Demography
- National health policy for reproductive health care and safe motherhood

Pre-requisites

- Definition of maternal, perinatal, neonatal and infant mortality
- Birth rate, death rate, growth rate, net reproduction rate.
- Available health care infrastructure

Objectives

At the end of the course the student should be able to:

1. Define obstetrics, gynecology, safe motherhood and reproductive health
2. List components and goals of National Health Policy with reference to reproductive health and safe motherhood
3. Identify socio-cultural, economic and demographic factors influencing reproductive health of women
4. List causes of maternal and perinatal mortality in order of relative importance
5. Describe current mortality and morbidity status of the nation

Learning Experiences

1. Clinical posting in the department and community posting
2. Integrated seminar with the department of community medicine
3. Case Assignment and follow up
4. Handouts, reading assignment
5. Case presentation
6. Family study, diagnosis and management, and referral

MANAGEMENT OF NORMAL PREGNANCY

- Development of placenta and development and growth of fetus
- Maternal adaptation to pregnancy
- Diagnosis of pregnancy
- Screening for high-risk pregnancy
- Fetal surveillance for growth and well-being

Pre-requisites

- Physiology of ovulation, menstruation, fertilization and conception
- Early development of fetus and placenta
- Nutrition requirements during pregnancy and lactation

Objectives

At the end of the course the student should be able to:

1. Explain the process of conception
2. Describe placental and fetal development and growth
3. Enumerate abnormal development of placenta and fetus
4. List the metabolic, endocrinal, cardiovascular, hematological, respiratory, urogenital and breast changes during pregnancy and lactation
5. Diagnose pregnancy by history, clinical examination, laboratory investigations and ultrasonography
6. Identify the high-risk factors in pregnant women and make appropriate referrals
7. Provide periodic antenatal care and immunization
8. Define commonly used terminology in pregnancy
9. Enumerate drugs which are safe during pregnancy, adverse effects of commonly used drugs and drugs to be avoided during pregnancy and lactation
10. Monitor fetal growth and well-being and identify deviations from normal

Learning Experience

1. Clinical posting in outdoor and indoor, minor operation theatre and labor room
2. Laboratory diagnosis of pregnancy (urinary β -hCG).
3. Problem based learning
4. Integrated seminar with radiology department.
5. Use of gravidogram
6. History taking, examination, and follow up of normal pregnancy
7. Lectures

MANAGEMENT DURING LABOR

- Mechanism of normal labor
- Intrapartum monitoring and use of partogram and cardiotocography (CTG)
- Pain relief during labor
- Management of normal delivery

- Management of third stage

Pre-requisites

- Anatomy of pelvis including different types of pelvises

Objectives

At the end of the course the student should be able to:

1. Describe various fetal presentations
2. Positions and diameters of fetal skull in relation to maternal pelvis
3. Describe physiology of initiation of labor
4. Describe mechanism of labor in vertex presentation
5. Diagnose true labor and monitor progress of labor using partogram
6. Identify deviations from normal
7. Conduct pelvic examination during labor
8. Identify different stages of labor
9. Describe measures for pain relief during labor
10. Conduct normal delivery with or without episiotomy
11. Manage third stage of labor

Learning Experiences

1. Perform and stitch episiotomies.
2. Plot of partogram for five (5) normal labor and five (5) abnormal labor cases
3. Conduct normal deliveries and assist in abnormal deliveries
4. Pelvic examination under supervision
5. Labor room posting
6. Log book recording
7. Problem based learning
8. Seminar and group discussion

MENSTRUAL FUNCTION AND DYSFUNCTION

- Menstrual disorders
- Dysmenorrhea
- Abnormalities of menarche and menopause

Pre-requisites

- Developmental anatomy of genital tract
- Physiology of ovulation, menstruation, menarche and menopause
- Endocrinology *at* menstrual cycle and menopause

Objectives

At the end of the course the student should be able to:

1. Define primary and secondary amenorrhea, menorrhagia, polymenorrhagia, metrorrhagia
2. Oligomenorrhea and dysmenorrhea
3. List causes of primary and secondary amenorrhea and other menstrual dysfunctions
4. Diagnose and manage a patient with menstrual dysfunction
5. List indications of and assist in endometrial biopsy, cervical dilatation and curettage cervical biopsy and endometrial aspiration
6. Describe abnormalities of puberty and menopause
7. Prepare a slide for assessment of hormonal status for vaginal cytology

Learning Experiences

1. Out-patient, minor operation theatre, gynecology ward posting
2. Integrated seminar
3. Perform, endometrial biopsy and endometrial aspiration under supervision
4. Lectures, handouts, reading assignments
5. Small Group discussion
6. Case presentation
7. PBL (Menstrual dysfunction)

COMMON GYNECOLOGICAL SYMPTOMS

- Vaginal discharge
- Pain abdomen
- Abdominal mass
- Utero-vaginal prolapse

Pre-requisites

- Anatomy of abdominal and pelvic organs
- Microbiology of normal vaginal flora
- Common pathogens of the female urogenital tract
- Supports of the uterus and vagina
- Antibacterial, antifungal and antiviral drugs

Objectives

At the end of the course the student should be able to:

1. List the causes of vaginal discharge, pain abdomen, abdominal mass and utero-vaginal prolapse
2. Correlate clinical findings and investigation results with symptomatology
3. Initiate primary management and identify conditions needing referral

Learning Experiences

1. Clinical posting in gynecology ward and outdoor
2. Preparation of wet smear for trichomonas, monilial and gonococcal infection
3. Integrated seminar with other disciplines like microbiology, pharmacology and anatomy
4. Case presentation

COMPLICATIONS IN PREGNANCY

TOPICS

1. **Complications of early Pregnancy**
 - a. Abortions
 - b. Ectopic pregnancy
 - c. Gestational trophoblastic tumors
 - d. Hyperemesis gravidarum
 - e. Retention of urine
2. **Obstetric Complications**
 - a. Multiple pregnancy
 - b. Malpresentations
 - c. Antepartum Hemorrhage

- d. Pregnancy induced hypertension and eclampsia
- e. Preterm labor and premature rupture of membranes.
- f. Intrauterine growth retardation.
- g. Rh isoimmunization.
- h. Intrauterine fetal death
- i. Repeated pregnancy loss.

3. Medical Complications

- a. Anemia
- b. Hypertensive disorders
- c. Renal disorders
- d. Cardio vascular disorders
- e. Diabetes mellitus
- f. Jaundice

4. Surgical Complications

- a. Appendicitis
- b. Intestinal obstruction
- c. Acute abdomen
- d. Twisted ovarian cyst

5. Infections During Pregnancy

- a. Malaria
- b. Tuberculosis
- c. Syphilis
- d. TORCH infections
- e. AIDS

Pre-requisites

- Normal physiology of pregnancy
- Nutrition during pregnancy
- Intra-uterine development and growth of fetus
- Blood groups and isoimmunization
- Bacterial, parasitic and viral infections
- initiation of labor
- Pharmacology of commonly used drugs

OBJECTIVES

1. Complications of early pregnancy

At the end of the course the student should be able to:

- a. List causes of bleeding during early pregnancy.
- b. Define, diagnose and describe management of ectopic pregnancy.
- c. Diagnose and outline the principles of management of different types of abortions including septic abortions
- d. Diagnose and outline the principles of management of patients with gestational trophoblastic neoplasms
- e. List causes of hyperemesis
- f. Assess state of hydration and replace fluid and electrolytes as required
- g. Maintain an intake and output chart
- h. List causes of urinary retention in early pregnancy

2. Obstetric complications

At the end of the course the student should be able to:

- a. List the causes, diagnose and institute primary management in patients of: multiple pregnancy, malpresentations, antepartum hemorrhage, pregnancy induced hypertension, eclampsia, preterm labor, premature rupture of membranes, intra uterine growth retardation, Rh isoimmunization, intra uterine fetal death and repeated pregnancy loss.

3. Medical complications

At the end of the course the student should be able to:

- a. Diagnose and classify anemia, hypertension, cardiovascular diseases, diabetes and jaundice in pregnancy.
- b. Indicate primary care management of a patient with medical disorders in pregnancy and refer appropriately.

4. Surgical Complications

At the end of the course the student should be able to:

- a. List causes of acute abdomen during pregnancy.
- b. Diagnose acute surgical problems such as' intestinal obstruction, acute appendicitis and twisted ovarian cyst during pregnancy.
- c. Institute primary management and refer appropriately

5. Infections During Pregnancy

At the end of the course the student should be able to:

- a. Diagnose and manage patients suffering from malaria and, tuberculosis during pregnancy Screen for and diagnose and manage syphilis during pregnancy.
- b. List components of TORCH infections.
- c. List perinatal infections and their effect on pregnancy and fetal out-come.
- d. Screen and manage HIV positive patients and patients with AIDS during pregnancy, labor and puerperium.

LEARNING EXPERIENCES

1. Complications of early pregnancy

- a. Clinical posting in outdoor, indoor, maternity wards and emergency ward
- b. Insertion of catheter with aseptic precautions under supervision
- c. Demonstration of use of various urinary catheters
- d. Integrated seminar with radiology and pathology department
- e. Problem based learning in cases of hydatid form mole, all types of abortion

2. Obstetric complications

- a. Clinical posting in out-patient department, maternity ward, labor room, obstetrics OR
- b. Problem based learning
- c. Case presentation
- d. Group discussion
- e. Clinical bed side grand round
- f. Lectures

3. Medical complications

- a. Clinical posting.
- b. Integrated seminar with medicine department.
- c. Problem based learning in case of heart disease with pregnancy, PIH, diabetes and jaundice
- d. Lectures

4. Surgical complications

- a. Posting in emergency ward OPD and gynecology ward

- b. Integrated seminar with surgical department
 - c. Case discussion
 - d. Problem based learning in Twisted ovarian cyst and appendicitis with pregnancy
 - e. Lectures
- 5. Infections during pregnancy**
- a. Clinical posting
 - b. Problem based learning in case of syphilis and tuberculosis with pregnancy
 - c. Integrated seminar with microbiology department

ABNORMAL LABOR

- Prolonged labor
- Obstructed labor
- Assisted delivery
- Breech delivery
- Forceps delivery
- Vento use in C-Section
- Version (I.P.V.)
- Destructive operations
- Post-partum hemorrhage
- Manual removal of placenta
- Birth canal injuries

Pre-requisites

- Stages of normal labor
- Mechanism of normal labor
- Anatomy of genital organs
- Placental separation

Objectives

At the end of the course the student should be able to:

1. Define prolonged and obstructed labor
2. Assist in operative deliveries (breech, forceps and vacuum extraction)
3. List indications, contraindications and steps of cesarean section
4. Assist in versions and destructive operations
5. Define primary and secondary post-partum hemorrhage, identify clinically causes of **PPH** and manage appropriately
6. Assist in manual removal of placenta
7. Identify and manage perineal and cervical injuries after delivery

Learning Experiences

1. Clinical posting in labor room
2. Assistance in operation in elective and emergency surgery
3. Problem based learning in labor, post-partum hemorrhage

PUERPERIUM

- Normal Puerperium
- Puerperal sepsis

- Lactation and Breast feeding
- Puerperal contraception and sterilization
- Psychological disturbances
- Neonatal care

Pre-requisites

- Physiology of puerperium
- Physiology of lactation
- Microbiology
- Basic drug therapy

Objectives

At the end of the course the student should be able to:

1. Define puerperium and puerperal sepsis and list their causes
2. Diagnose and institute primary management in a case of puerperal sepsis
3. Describe the process of lactation and importance of breast feeding and lactation management
4. List the psychiatric disorders during puerperium
5. Advise for puerperal contraception

Learning Experiences

1. Clinical posting in OPD and maternity ward
2. Case discussion
3. Practical demonstration on breast care and breast feeding
4. Demonstration of contraception on mannequins
5. Assist in puerperal sterilization
6. Vasectomy
7. Norplant Insertion and removal
8. Injectable contraceptives
9. Lecture

INFERTILITY

- Causes, investigations and management of infertile couples

Pre-requisites

- Anatomy of female and male genital tract and their developmental disorders.
Physiology of ovulation, menstrual cycle, fertilization and conception spermatogenesis

Objectives

At the end of the course the student should be able to:

1. List causes of infertility in females and males
2. Obtain history from a couple suffering from infertility including psychosexual history and do detail initial evaluation
3. Outline plan of investigation and management
4. List indications, contra indications and describe procedures for cervical mucus scoring, postcoital test, endometrial biopsy, tubal insufflation test and hysterosalpingogram
5. Interpret results of investigations in female and male

6. Counsel regarding fertile period, basal body temperature recording and adoption

Learning Experiences

1. Problem based learning in secondary infertility
2. Case discussion
3. Clinical posting in gyne outdoor
4. Perform cervical mucus scoring and post coital test
5. Lectures

GENITAL INFECTIONS

- Upper genital tract infection
- Lower genital tract infection
- Urinary tract infection
- Post-operative infection

Pre-requisites

- Common microbial pathogens of the urogenital tract
- Physiology of wound healing
- Physiology of micturition
- Changes in vagina during different phases of menstrual cycle and pregnancy

Objectives

1. List common organisms responsible for lower and upper genital tract, urinary tract and post-operative infections
2. Diagnose clinically common types of vaginitis
3. Define and outline clinical features and management of pelvic inflammatory disease
4. Describe clinical features and management of genital tuberculosis
5. List cause of adnexal masses
6. Describe causes, clinical features and treatment of urinary tract infection
7. Explain diagnosis, management and principles of prevention of postoperative Infection

Learning Experiences

1. Clinical posting in Gyne-ward and OPD
2. Case discussion
3. Integrated seminar with department of microbiology
4. Lectures

GYNECOLOGICAL MALIGNANCIES

- High risk factors
- Screening & early diagnosis
- Staging
- Principles of management

Pre-requisites

- Pathogenesis of genital precancer
- Pathology of neoplasia
- Classification of different genital cancers
- Pharmacology of anticancer drugs
- Principles of radiotherapy

- Tumor markers in gynecological malignancies

Objectives

At the end of the course the student should be able to:

1. List high risk factors for cervical, uterine, endometrial, ovarian and breast cancer.
2. Screen women for presence of high-risk factors
3. Prepare a slide for pap-smear and interpret result of cytological diagnosis
4. Carry out breast examination
5. Diagnose genital cancer and stage according to FIGO classification
6. Outline principles of management based on cancer type and stage including chemotherapy and radiotherapy

Learning Experiences

1. Clinical posting
2. Problem based learning in case of carcinoma of cervix, and ovary
3. Case presentation
4. Integrated seminar with pathology, radiotherapy, and oncology department
5. Lectures

FERTILITY REGULATION

- MTP
- Contraception (Barrier methods)
- Sterilization, vasectomy (Permanent methods)
- Emergency Contraception.

Pre-requisites

- Anatomy of genital tract
- Physiology of ovulation and conception
- Pharmacology of hormonal contraception
- Mechanism of action of contraceptives

Objectives

At the end of the course the student should be able to:

1. List the temporary and permanent method of male and female contraception
2. List merits and demerits of different methods
3. Counsel eligible couple regarding appropriate fertility regulation methods
4. Assist in intra-uterine device insertion. suction evacuation, tubal ligation, vasectomy, Norplant insertion and removal
5. Know the legal issues related to abortion, contraception and sterilization

Learning Experiences

1. Clinical posting in gyne ward and family planning center
2. Practical experience of various contraceptives on mannequin
3. Lectures

EMERGENCY OBSTETRICS & GYNECOLOGY

- Excessive vaginal bleeding
- Acute abdomen

- Convulsions
- Coma
- Obstetric shock
- Injuries & accidents of genital tract

Pre-requisites

- Physiology of menstruation
- Anatomy of abdominal and pelvic organs
- Etiopathogenesis and primary management of convulsions, coma and shock
- Principles of hemostasis

Objectives

At the end of the course the student should be able to:

1. List the causes of excessive vaginal bleeding in different ages
2. Correlate clinical findings with specific clinical conditions
3. Resuscitate the patient and initiate primary treatment
4. Refer emergency cases appropriately
5. List causes of genital injuries, describe clinical features and institute primary management.

Learning Experiences

1. Clinical posting
2. Integrated seminar with anesthesia, surgery and medicine department

MISCELLANEOUS

- Drugs and substance abuse
- Preoperative and post-operative care
- Medicolegal and ethical issues

Pre-requisites

- Pharmacology of substance abuse
- Medicolegal and ethical issues

Objectives

At the end of the course the student should be able to:

1. Recognize cases for medicolegal registration, counsel and practice medical ethics as related to obstetrics and gynecology
2. Recognize, counsel and manage patients with substance abuse

Learning Experience:

1. Clinical posting in Gyne-OPD and casualty
2. Integrated seminar with forensic medicine department

ASSESSMENT

Formative assessments

- a. Students will be assessed on a day-to-day basis.
- b. Logbook maintenance (during the period of posting in the labor room)
- c. Mid and End Rotation assessment

Summative assessment

- a. Evaluation of theory and practical as per institutional policy.
- b. Objective structured clinical examination (OSCE) shall include:
 - a. Interpretation of test items e.g., temperature chart, instruments, X-rays, anatomical
 - b. Parts, pathological specimens (macroscopic and microscopic).

Rotation Schedule

	7 - 8	8 - 9	10 - 11	11 - 12	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
Monday	Independent rounds & Ward Work	Morning Hand Over	Admission Conference	OPD/Clinics	Didactic Lectures	Didactic Lectures	OPD/Clinics	SDL	Afternoon Endorsement Rounds & Ward Work
Tuesday	Independent rounds & Ward Work	Morning Hand Over	OPD/Clinics	OPD/Clinics	Journal Club	OR/Labor/DR	OR/Labor/DR	Afternoon Endorsement Rounds & Ward Work	SDL
Wednesday	Independent rounds & Ward Work	Morning Hand Over	Pre-Op Conference	OPD/Clinics	Didactic Lectures	Didactic Lectures	OPD/Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Thursday	Independent rounds & Ward Work	Morning Hand Over	OPD/Clinics	OPD/Clinics	Discharge/Handover Conference	OR/Labor/DR	OR/Labor/DR	SDL	Afternoon Endorsement Rounds & Ward Work
Friday	Independent rounds & Ward Work	Morning Hand Over	*Morbidity/Mortality	OPD/Clinics	Didactic Lectures	Didactic Lectures	OPD/Clinics	SDL	Afternoon Endorsement Rounds & Ward Work
Saturday	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call
Sunday	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call

**Tumor Board scheduled in same slot, done on different weeks*

Didactic Lecture

3
Lecture
Orientation, Introduction and Placement
Assessment of the Fetus
Malaria in Pregnancy
Normal Labor
History & Physical Examination (Gynecology)
Maternal Physiology
Vulva Lesion
Obstetric Anatomy
Week 2
History & Physical Examination (Gynecology)
Anemia
Diagnosis of Pregnancy + Ectopic Pregnancy
Abortion
Abnormalities of Menstruation
Placenta Abruption
Embryology, Anatomy & Physiology of the Reproductive Tract
Week 3
Antenatal Care
Gestational Trophoblastic Disease
Endometriosis
Vomiting in Pregnancy
Abnormal Labor
IUGR
Post-Partum Hemorrhage
Cervical Cancer
Week 4
Infertility
Placenta Previa

Ultrasound in Pregnancy
Uterine Leiomyomas
Pelvic Organ Prolapse
Family Planning: Sexuality & Contraception
Gynecological Infection
Endometrial Cancer
Week 5
UTI in Pregnancy
Ovarian Cancer
HTN Pregnancy
Thyroid Disease in Pregnancy
Preterm Premature Rupture of Membranes PPRM
Abnormal Uterine Bleeding + Vital Statistics
Rhesus Incompatibility
Renal Disease
Week 6
Menopause
Diabetes Mellitus in Pregnancy
Clinical Case Presentation Compilation Revision
Amenorrhea
Revision

Advisable Minimum Cases

		Observed (O)		Assisted (A)		Performed (P)	
	OB-Gyn Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Spontaneous Vaginal Delivery with/without episiotomy, perineal support)	5		5		5	
2	Spontaneous Vaginal Delivery without episiotomy or with perineal support)	5		5		5	
2	Caesarian Section	5		1		0	
3	Dilatation & Curettage	5		5		0	
5	Bi-Lateral Tubal Ligation	2		2		0	
6	TAH-BSO	2		0		0	
7	Ectopic Pregnancy	2		0		0	
8	Gynecologic Oncology Procedure	2		0		0	
9	PAP smear	5		5		5	
10	Obstetric and Gynecologic Imaging	5		5		1	
11	Cardiotocography (CTG) Administration & Interpretation	5		5		5	
		Observed (O)		Active Participation (AP)		Co-Managed/Managed (M)	
	OB-Gyn Medical Cases (Non-Procedural)	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Pre-Eclampsia/Eclampsia	2		1		0	
2	Abortion (Including Threatened, Imminent, Missed)	3		3		0	
3	Induction & Augmentation of Labor	2		2		0	
4	Post-Partum Hemorrhage	2		2		0	
5	Diabetes/Gestational Diabetes	2		2		1	
6	Placental Abnormalities	1		1		0	
7	DUB/AUB	3		3		1	
8	Infertility (Primary & Secondary)	2		2		1	
9	Neoplasia (other than Cervical Cancer)	3		2		0	
10	Cervical Cancer	1		1		0	
11	Pelvic Inflammatory Disease & STD	3		3		0	
13	Prenatal and Post Natal Consults	10		5		5	
14	Family Planning	2		0		0	
15	Medicolegal Cases	5		5		5	

Appendix 4: Pediatrics Syllabi

Clerkship Objectives

At the end of the clerkship the student should be able to:

1. Take a proper pediatric history and understand the difference in obtaining a medical history on a pediatric patient as compared to an adult.
2. Understand general approach to the physical examination of a child and document physical findings accordingly.
3. Use the database and H&P findings to diagnose and manage common neonatal and childhood diseases/ problems that require primary care.
4. Identify neonatal and childhood illness problems that require referral and refer them.
5. Diagnose and provide primary care in acute Pediatric and neonatal emergencies.
6. Provide emergency cardio-pulmonary resuscitation to newborns and children.
7. Counsel and guide patients, parents and relatives regarding the illness, care, possible complications, and prognosis.
8. Participate in the National Programmes related to child health.

Learning Outcome

Pre-requisites

- Physiology and biochemistry of nutrients. Nutritive value of common food items. Nutritional requirements at different ages. Ability to use the growth charts. Anthropometry.
- Developmental milestones.
- Immunization schedule.
- Definition of terms: IMR, NMR, PNMR, UFMR, MMR

Objectives

At the end of the course the student should be able to:

- **History taking and physical examination**
 - Elicit and record relevant history with special reference to antenatal, natal and postnatal
 - periods, nutrition, immunization & growth & development.
 - Conduct physical examination and elicit relevant signs.
 - Correlate the complaints and physical signs to arrive at a logical diagnosis with justification.
- **Nutritional disorders**
 - Assess nutritional status of children at different age groups.
 - Recognize nutritional disorders with special reference to PEM, Childhood overweight and obesity Vitamin A deficiency, nutritional anemias, Iodine deficiency disorders and rickets.
 - Plan and advice on nutritional requirements of infants and children.

○ **Growth and development**

- Record and assess growth patterns in terms of weight, height, head circumference, dentition, body proportions and identify deviations from normal using growth charts.
- Recognize disorders of growth with special reference to short stature and failure to thrive: and institute appropriate management.
- Assess the developmental status of a child with special reference to milestones in gross, fine motor, social emotional and language skills and identify deviations from normal.
- Recognize the disorders of development with special reference to mental retardation, cerebral palsy, global developmental delay, Pervasive Developmental disorders and ADHD and institute appropriate management.
- Counsel parents about childhood symptoms that cause undue anxiety.

○ **National Child Health Programmes**

- Describe national immunization schedule and administer the same in the community and hospital setting.
- List the national programmes of maternal and child health.

○ **Child Health Situation: Vital Statistics**

- State the current IMR, NMR, PNMR, UFMR and MMR
- Enumerate the common causes of perinatal, neonatal, infant and under five mortality and morbidity.
- List the preventive measures necessary for the reduction of childhood morbidity and mortality.

○ **Childhood disabilities**

- Recognize the childhood disabilities and counsel parents for the rehabilitation of disabled.

○ **Pediatric emergencies**

The students should be able to diagnose and institute primary care management and possible preventive measures of the following emergencies:

- Breathlessness
- Convulsions
- Respiratory distress
- Shock
- Dehydration Hypertensive crises
- Hemorrhages
- Cyanotic spells
- Congestive cardiac failure

- Poisonings with kerosene, insecticides, paracetamol, iron etc.
- Scorpion stings and
- Snake bite.

INFECTIOUS DISEASES

Pre-requisites

- Microbiology of infective agents.
- Pathologic changes in respective infections.

Objectives

The students should be able to recognize the clinical features, relate them to pathophysiology, diagnose and institute primary care management and prophylactic measures in the following common infective disorders:

- Viral - mumps, measles, rubella, poliomyelitis, chickenpox, hepatitis and HIV, respiratory viruses (influenza, parainfluenza, rhinovirus, rsv, corona virus and adenovirus), enterovirus (D68, HFMD, Coxsackievirus B3 B5, poliovirus), zika, dengue, West Nile and chikungunya
- Bacterial - tuberculosis, leprosy, pertussis, diphtheria, typhoid, pyoderma, leptospirosis and furunculosis.
- Parasitic - malaria, kala-azar, giardiasis, amebiasis, filariasis, intestinal helminthiasis, taeniasis, scabies, pediculosis
- Fungal - common cutaneous and systemic infections like candidiasis and dermatophytosis

NEONATOLOGY

Pre-requisites

- Physiology of fetal circulation.
- Changes in circulation at birth.
- Mechanisms of thermo-regulation.

Objectives

At the end of the course the student should be able to:

- Examine the neonates, elicit & interpret neonatal reflexes & provide care for a normal newborn.
- Detect birth trauma and hypoxic ischemic encephalopathy (HIE); and provide emergency cardio-pulmonary resuscitation.
- Identify neonates with congenital malformations, institute primary care management and refer appropriately.
- Assess the gestational age of a neonate and identify the preterm and neonates and with IUGR, manage them with special reference to maintenance of body temperature, feeding, prevention of complications and appropriate method of transfer to a facility with higher level of care.

- Recognize and manage high risk infant, neonates with hypoglycemia, hypocalcemia, hypothermia, anemia, jaundice, respiratory distress, septicemia, hematologic diseases of newborn, feeding difficulties and infants of diabetic mothers
- Perform neonatal screening
- Recognize the types and differentiate the different causes of neonatal seizures

HEMATOLOGY

Pre-requisites

- Hemopoiesis, normal hematological values in children.
- Morphological features of different anemias.
- Hepato-portal circulation.

Objectives

The students should be able to recognize the clinical features, relate them to pathophysiology, diagnose, institute primary care management and prophylactic measures in the following disorders:

- Nutritional, hemolytic, hypoplastic and aplastic anemias.
- Bleeding and coagulation disorders.
- Leukemias
- Plan and undertake safe blood transfusion and recognize hazards of transfusion.

GASTROINTESTINAL SYSTEM

Pre-requisites

- Structure of the gastrointestinal tract
- Physiology of digestion and absorption
- Pathophysiology of diarrhea
- Microorganisms causing diarrhea and dysentery
- Physiology of gut mobility
- Pathophysiology of edema

Objectives

The students should be able to identify the common causes and arrive at a logical diagnosis and institute primary care of the following:

- Acute diarrhea
- Chronic and persistent diarrhea
- Dysentery
- Acute abdomen
- Paralytic ileus
- Chronic constipation
- Recurrent vomiting
- Ascites

- GI Bleeding
- Inflammatory bowel disease
- Malabsorption

HEPATO-BILIARY SYSTEM

Pre-requisites

- Liver function tests
- Pathology of hepatitis and cirrhosis Microbiology of hepatitis viruses
- Drug metabolism in liver and hepatotoxic drugs

Objectives

The students should be able to recognize the clinical features, relate them to pathophysiology, diagnose, and institute primary care management and prophylactic measures of the following:

- Viral hepatitis
- Cirrhosis of liver
- Portal hypertension
- Liver abscess
- Hepatic failure

CARDIOVASCULAR SYSTEM

Pre-requisites

- Hemodynamics
- Electrocardiography
- Measurement of BP
- Fetal circulation
- Pulmonary circulation
- Pathology of rheumatic heart diseases
- Pharmacology of decongestants and antibiotics

Objectives

The student should be able to recognize the clinical features, relate them to pathophysiology, diagnose, and institute primary care management and prophylactic measures in the following:

- Acute Rheumatic Fever & Rheumatic heart disease
- Congenital acyanotic heart diseases like ASD, VSD, PDA.
- Congenital cyanotic heart diseases e.g., TOF.
- Cyanotic spells.
- Infective endocarditis.
- Congestive cardiac failure
- Hypertension

- Childhood Connective tissue diseases such as: Kawasaki disease, juvenile idiopathic arthritis, SLE, Henoch-Schoenlein purpura

CENTRAL NERVOUS SYSTEM

Pre-requisites

- Microbiology of poliovirus and other common CNS pathogens.
- Physiology of CSF circulation
- Biochemistry of CSF

Objectives

- The students should be able to recognize the clinical features, relate them to patho-physiology, diagnose, and institute primary care management and prophylactic measures of the following:
 - Meningitis, Encephalitis and Meningoencephalitis
 - Intracranial space occupying lesions.
 - Hydrocephalus
 - Peripheral Nerve Diseases such as muscular dystrophies, floppy infant syndrome and progressive demyelinating diseases
- Identify the common causes of arrive at a logical diagnosis and institute primary care of the following:
 - Comatose child,
 - Seizure disorders
 - Raised intracranial tension

GENITO URINARY SYSTEM

Pre-requisites

- Functions of kidney and renal function test
- Formation of urine
- Fluid, electrolyte and acid base balance
- Microbiology of common urinary pathogens
- Drug metabolism in renal failure

Objectives

- The students should be able to recognize the clinical features, relate them to patho-physiology, diagnose, institute primary care management and prophylactic measures in the following:
 - Urinary tract infection
 - Acute glomerulonephritis
 - Nephrotic syndrome and Nephritic syndromes
 - Acute renal failure

- Identify the common causes, arrive at a logical diagnosis and institute primary care of hematuria.

RESPIRATORY SYSTEM

Pre-requisites

- Microbiology of common respiratory pathogens.
- Respiratory physiology.
- Pulmonary function test.
- Pathology of common ARI.
- Pharmacology of common antibiotics and bronchodilators.

Objectives

The students should be able to recognize the clinical features, relate them to pathophysiology, diagnose, institute primary care management and prophylactic measures in the following:

- ARI
- Bronchial asthma
- Pneumonia
- Bronchiolitis
- Otitis media
- Foreign body aspiration

ENDOCRINE SYSTEM

Pre-requisites

- Physiology and biochemistry of thyroid and islet cells of pancreas.
- Pharmacology of insulin and thyroxine.

Objectives

The students should be able to recognize the clinical features, relate them to pathophysiology, diagnose, institute primary care management and prophylactic measures in the following:

- Hypothyroidism and goiter.
- Diabetes mellitus.
- Ambiguous genitalia.
- Investigation of short stature

CHROMOSOMAL AND GENETIC DISORDERS

Pre-requisites

- Normal karyotype
- Morphology of chromosomes
- Patterns of inheritance

Objectives

At the end of the course the student should be able to suspect, investigate and refer appropriately:

- Down's syndrome

- Turner's syndrome

ONCOLOGIC DISORDERS

Pre-requisites

- Basic concept of neoplasia.
- Pharmacology of chemotherapeutic agents.

Objectives

At the end of the course the student should be able to suspect, investigate and refer appropriately:

- Lymphomas
- Leukemias
- Wilms' tumor
- Sarcomas

MUSCULOSKELETAL SYSTEM DISORDERS

Objectives

At the end of the course the student should be able to suspect, investigate and refer appropriately:

- Inherited diseases of Skeletal Muscle:
 - Duchenne and Becker muscular dystrophy
 - Dermatomyositis

BEHAVIOURAL PEDIATRICS

Objectives

The student should be able to recognize the clinical features, relate them to pathophysiology, diagnose, institute primary care management and prophylactic measures in the following common childhood behavioral disorders:

- Attention deficit
- Conversion reactions
- Conduct disorders
- Learning disabilities and ADHD
- Autism spectral disorders
- Depression

ADOLESCENCE

Objectives

The students should be able to identify the common problems, institute primary care management and counsel the adolescents and their parents on:

- Problems of puberty
- Sexuality in adolescence
- Adjustments during adolescence

- Substance abuse

LEARNING EXPERIENCE

1. Orientation of the students to the hospital services.
2. Allocation of beds for clinical work and follow up.
3. Case presentation by students (including history, physical findings and progress of the patients).
4. Seminars: student/faculty seminar on clinical problems.
5. Problem solving discussions based on:
 - a. A specific patient in the wards, ORT center, OPD, etc.
 - b. A given case report consisting of history, physical findings and investigation reports.
6. Lecture discussion sessions.
7. Field visits to MCH clinics:
 - a. Demonstration of administration of vaccines.
 - b. Practice administering vaccines.
 - c. Counselling of mothers for vaccination in future.

Rotation Schedule

	7 - 8	8 - 9	10 - 11	11 - 12	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6
Monday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Admission Conference	OPD/ Clinics	OPD/ Clinics	Didactic Lectures	Didactic Lectures	Didactic Lectures	SDL
Tuesday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	OPD/ Clinics	OPD/ Clinics	Didactic Lectures	Didactic Lectures	OPD/ Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Wednesday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Journal Club	Didactic Lectures	Didactic Lectures	Didactic Lectures	OPD/ Clinics	Afternoon Endorsement Rounds & Ward Work	SDL
Thursday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	OPD/ Clinics	OPD/ Clinics	Discharge/ Handover Conference	OPD/ Clinics	OPD/ Clinics	SDL	Afternoon Endorsement Rounds & Ward Work
Friday	Morning Teaching/Endorsement Rounds and Ward Work	Morning Teaching/Endorsement Rounds and Ward Work	Morbidity/ Mortality*	Didactic Lectures	Didactic Lectures	Didactic Lectures	OPD/ Clinics	SDL	Afternoon Endorsement Rounds & Ward Work
Saturday	Ward Work	Ward Work							
Sunday	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call	On Call

*Tumor Board scheduled in same slot, done on different weeks

Didactic Lecture

Week 1
Meningitis/Encephalitis
Malaria
Acute gastroenteritis
Asthma
Week 2
Bronchiolitis
Pneumonia
Congestive heart failure
Anemia
Week 3
Hepatitis/jaundice (including neonatal jaundice)
Seizures
Well-baby care
Prematurity
Week 4
Birth asphyxia and neonatal resuscitation
Meconium aspiration syndrome
Neonatal infections
Neonatal hypoglycemia
Diabetes and diabetic keto acidosis
Week 5
Leukemia
Lymphoma
Shock
Nephrotic syndrome
Glomerulonephritis
Week 6
Pediatric fluid, electrolyte and nutrition management

Malnutrition
Pediatric toxicology
Bleeding in the pediatric patient

Advisable Minimum Cases

		Observed (O)		Active Participation		Co-Managed/Managed (M)	
	Non-Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Peri/Neonatal Assessment and Care	5		5		0	
2	Well Baby Check-up & Breastfeeding	10		5		5	
3	Neonatal Sepsis	2		1		0	
4	Congenital & Acquired Heart Disease	2		2		2	
5	Reversible Obstructive Airway Disease (Asthma)	5		3		3	
5	Malnutrition (including Obesity)	2		2		2	
6	Respiratory Tract Infection	5		5		5	
7	Diarrheal Diseases	5		1		0	
8	Tuberculosis	5		5		5	
11	Atopic Disorders (excluding asthma)	5		5		5	
14	WBC Neoplasm	1		1		1	
15	RBC Dyscrasias & Anemias	3		3		3	
18	Nephrotic Syndrome & Nephritides	1		0		0	
21	Seizure Disorder	2		0		0	
22	Autoimmune Disorder	1		1		1	
24	Dermatomycoses	5		5		5	
25	Substance Abuse	3		3		0	
	Procedures	Observed (O)		Assisted (A)		Performed (P)	
		Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Lumbar tap	2		1		0	
2	Umbilical Catheterization	1		1		0	
3	Venoclysis & IVF therapy	5		5		3	
4	Neonatal Screening Test	5		5		0	
7	Arterial Phlebotomy	2		2		0	

Appendix 5: Family Medicine Syllabi

Clerkship Objectives

At the end of the clerkship the student should be able to:

1. Describe how illnesses present at an early undifferentiated stage in the Family Medicine environment when compared to the other clinical settings.
2. Demonstrate effective communication skills in carrying out a patient-centred interview, exploring the patient's illness experience, personal history, and social context.
3. Perform a physical examination, which is accurate and appropriate to the presenting problem and sensitive to patient comfort and interpret the findings.
4. Describe the indications for, risks of and methods used in the common investigations, diagnostic and interventional procedures used for the common problems and presentations in a Family Medicine setting and interpret the results.
5. Demonstrate clinical problem-solving skills, including the ability to diagnose and to initiate management (both non-pharmacological and pharmacological) with supervision, of the common problems and presentations in a Family Medicine setting.
6. Communicate effectively, both orally and in writing, including documenting in patient records, making case presentations, writing prescriptions, writing referrals and in negotiating and summarizing the management plan with patients in a patient-centered manner.
7. Demonstrate an understanding of common ethical issues in practice such as confidentiality, consent, and patient autonomy.
8. Recognize the importance of personal health on one's ability to care for others.
9. Introduce health promotion and disease prevention activities appropriate to practical patient population.
10. Demonstrate self-directed lifelong learning and use evidence-based resources to provide the patient care.

Learning Outcome

I. THE PRINCIPLES OF FAMILY MEDICINE

1. The Biopsychosocial Model Objectives:

Patient-centered communication skills:

- Demonstrate an empathic response to patients using active listening skills.
- Demonstrate the ability to set a collaborative agenda with the patient during any patient encounter.
- Demonstrate the ability to elicit, prioritize and attend to the patient's specific concerns.
- Review patient's history, physical examination, and test results using terminology that the patient can understand.
- Clarify information obtained by a patient from popular media, friends and family, or the Internet.
- Validate a patient's feelings by naming emotions and expressing empathy.

- Effectively incorporate psychological issues into patient discussions and care planning.
- Use empathy and active listening skills to improve patient adherence to medications and lifestyle changes.
- Explain treatment plans for prevention and management of acute and chronic conditions to the patient.
- Reflect on personal frustrations and the patient's situation to better understand why patients do not adhere to offered recommendations or plans.

Psychosocial awareness:

- Explain why physicians have difficulty in situations such as patients' requests for disability documentation, non-adherence, and chronic narcotic use.
- Describe the influence of psychosocial factors on a patient's ability to provide a history and carry out a treatment plan.

Patient education:

- Describe mechanisms to improve adherence to and understanding of screening recommendations.
- Provide patient education tools that account for literacy and cultural factors (e.g., a handout on how to read nutrition labels).
- Describe the patient education protocols for core chronic illnesses at their assigned clerkship sites.
- Identify resources in a local practice community that support positive health outcomes for diverse patients and families.
- Promote the use of support groups and other community resources to assist patients with mental health needs.
- Identify and distribute current resources for patients with substance abuse problems at their clinic sites (e.g., lists of treatment referral centers, self-help groups, substance abuse counselors, etc.).

2. Comprehensive Care Objectives:

Information gathering and assessment:

- Apply critical appraisal skills to assess the validity of resources.
- Formulate clinical questions important to patient management.
- Conduct an appropriate and comprehensive literature search to effectively answer clinical questions.
- Apply evidence-based medicine (EBM) to determine a cost-effective use of diagnostic imaging in the evaluation of core, acute presentations.
- Demonstrate ability to discriminate between high and low-quality evidence when searching the medical literature.
- Utilize high-quality Internet sites as resources for use in caring for patients with core conditions.
- Curate a set of high-quality mobile apps for quick reference when delivering patient care.

Lifelong learning:

- Demonstrate an appropriate level of meta-cognitive skills to assess and remediate one's own learning needs.
- Describe an individualized, evidence-based process on how to keep current with preventive services recommendations.

- Create an evolving set of learning goals and measures of success for those goals that address areas for improvement.

3. Contextual Care

Objectives:

Person in context of family:

- Conduct an encounter that includes patients and families in the development of screening and treatment plans.
- Demonstrate caring and respect when interacting with patients and their families even when confronted with atypical or emotionally charged behaviors.
- Demonstrate interpersonal and communication skills that result in effective information exchange between patients of all ages and their families.
- Demonstrate an awareness of a patient's broader family context when delivering care.

Person in context of community:

- Incorporate knowledge of local community factors that affect the health of patients into daily patient care.
- Demonstrate awareness of local, regional and national health disparities and their impact on patient care.
- Practice interpersonal and communication skills that result in effective information exchange between patients of all ages and professionals from other disciplines and other specialties.

Person in context of their culture:

- Communicate effectively with patients and families from diverse cultural backgrounds.
- Identify areas where a patient's cultural context can impact his health through comprehension, cultural perspective, access and utilization of health care.
- Describe one's own cultural influences and biases as they impact one's ability to effectively deliver patient care.

4. Continuity of Care

Objectives:

Barriers to access:

- Define social determinants of health and their role in continuity of care.
- Describe the social determinants that can affect a patient's ability to access and utilize the health care system at multiple levels:
 - Individual patient barriers
 - Disadvantaged minority populations (e.g., refugees, LGBTQ, incarcerated)
 - Unemployment
 - Lack of education
 - Lack of traditional family support
 - Inadequate access to transportation
 - Personal beliefs of health and wellness
 - Language and cultural barriers
 - Community barriers
 - Inadequate number of healthcare providers
 - Inadequate availability of social services
 - Inadequate access to referral-based health services outside of the community

- Increasing ethnic diversity of the population, not matched by the health care workforce
- Health care system barriers
 - High cost of healthcare
 - High numbers of uninsured and under-insured individuals
 - Insufficient capacity of mental health services
 - Inadequate number and distribution of primary care providers
 - Inadequate coordination of chronic disease care and management across health care disciplines

5. Coordination/Complexity of Care

Objectives:

Team Approach:

- Describe the benefits of interdisciplinary health care teams in patient care
- Demonstrate skills in effective teamwork

Quality and Safety:

- Define clinical processes established to improve performance of a clinical site such as:
 - Describe the use of a quality improvement protocol within a practice and how the protocol might improve health care
 - Describe methods of monitoring compliance with preventive services guidelines
 - Describe how one of the core chronic diseases is monitored in the assigned clerkship site
 - Describe how narcotic use is managed and monitored in the assigned clerkship site

Complexity of Care:

- Identify diagnostic uncertainty and the role of multi-systemic influence on a patient's condition.
- Adapt to changing patient presentation and needs.
- Utilize effective patient care management strategies in patient's presenting with complex conditions.
- Describe the use of health information technology to enhance care coordination.
- Summarize the importance of linking resources with patient and population needs.

II. CLINICAL CARE

OVERVIEW

Demonstrate and explain the key characteristics of Family Physicians:

- Prior knowledge of the patient
- Care for a diverse population
- Provide care in a community setting
- Multipurpose visits
- Staged diagnostic approach
- Opportunity for follow up care

1. ACUTE CARE

Objectives:

- Differentiate among common etiologies based on the presenting symptom.
- Recognize “don’t miss” conditions that may present with a particular symptom.
- Demonstrate performance of a focused history and physical examination.
- Interpret information for a patient’s history and physical exam to determine most likely diagnosis.
- Discuss the importance of a cost-effective approach to the diagnostic work-up.
- Describe the initial management of common and dangerous diagnoses that present with a particular symptom.
- Document an acute care visit

Core Topics on Acute Presentations:

1. Abdominal pain – common vs. emergent conditions
2. Abnormal vaginal bleeding
3. Chest pain
4. Skin lesions – benign vs. neoplastic conditions
5. Rashes
6. Cough
7. Dementia (Acute symptoms)
8. Depression (Initial presentation)
9. Dizziness
10. Dysuria
11. Fever
12. Headache
13. Joint pain & injuries
14. Leg swelling
15. Low back pain
16. Male genitourinary symptoms
17. Diagnosis of pregnancy
18. Difficulty of breathing/wheezing
19. Upper respiratory symptoms
20. Vaginal discharge

2. CHRONIC CARE

Objectives:

- Find and apply diagnostic criteria.
- Find and apply surveillance strategies.
- Elicit a focused history that includes information about adherence, self-management, and barriers to care.
- Perform a focused physical examination that includes identification of complications.
- Assess improvement or progression of the chronic disease.
- Describe major treatment modalities.

- Propose an evidence-based management plan that includes pharmacologic and non-pharmacologic treatments and appropriate surveillance and tertiary prevention.
- Communicate appropriately with other health professionals that are involved in the patient's care (e.g., physical therapists, nutritionists, counselors).
- Document a chronic care visit.
- Communicate respectfully with patients who do not fully adhere to their treatment plan.
- Educate a patient about an aspect of his/her disease respectfully, using language that the patient understands. When appropriate, ask the patient to explain any new understanding gained during the discussion.

Core Topics on Acute Presentations:

1. Multiple chronic diseases
2. Anxiety
3. Arthritis
4. Asthma/COPD
5. Coronary artery disease
6. Chronic back pain
7. Depression
8. Diabetes mellitus
9. Heart failure
10. Hyperlipidemia
11. Hypertension
12. Obesity
13. Osteoporosis/osteopenia
14. Substance use, dependence and abuse

3. HEALTH PROMOTION & PREVENTIVE CARE

OVERVIEW – KEY FEATURES OF PREVENTIVE CARE BY FAMILY PHYSICIANS

1. Evidence based
2. Individualized
3. Opportunistic
4. Prioritized

Objectives:

- Define wellness as a concept that is more than “not being sick.”
- Define primary, secondary, and tertiary prevention.
- Identify risks of specific illnesses and behaviors that affect screening and treatment strategies.
- Develop a health promotion plan for a patient of any age or either gender that addresses the core health promotion conditions listed in Table 9.
- Identify and perform recommended age-appropriate screenings.
- Describe the core components of pediatric preventive care – health history, physical examination, immunizations, screening/diagnostic tests, and anticipatory guidance.
- Identify pediatric developmental stages and detect deviations from anticipated growth and developmental levels.
- Elicit a gynecological and obstetric history for appropriate screening and treatment.

- Conduct a physical examination on a child and recognize normal and abnormal physical findings in various age groups.
- Apply the stages of change model and use motivational interviewing to encourage lifestyle changes to support wellness (weight loss, tobacco cessation, safe sexual practices, physical activity, nutrition, diet).
- Provide counseling related to health promotion and disease prevention.
- Provide pediatric patients and their families with anticipatory guidelines based on developmental stage and health risks.
- Discuss an evidence-based, stepwise approach to counseling for behavior change, including tobacco cessation.
- For each core health promotion condition in Table 9, discuss who should be screened and methods of screening.
- Find and apply the current guidelines for immunizations, including protocols to “catch-up” a patient with incomplete prior immunizations.
- Communicate effectively with children, teens, and families.
- Document a health maintenance visit.

Core Topics for Health Promotion

1. Children & Adolescents
 - a. Abuse/neglect
 - b. Diet/exercise
 - c. Family/social support
 - d. Growth & development
 - e. Hearing
 - f. Heavy metal exposure
 - g. Nutritional deficiency
 - h. Potential for injury
 - i. Sexual abuse
 - j. Substance use
 - k. Tuberculosis
 - l. Vision

2. Adults
 - a. Breast cancer
 - b. Cervical cancer
 - c. Colon cancer
 - d. Coronary artery disease
 - e. Diabetes mellitus
 - f. Fall risk in the elderly
 - g. Intimate partner & family violence
 - h. Obesity
 - i. Osteoporosis
 - j. Prostate cancer
 - k. STDs
 - l. Substance use/abuse

III. THE ROLE OF FAMILY MEDICINE

Discussions about the value of primary care and the provision of primary care by family physicians is incorporated into acute symptom, chronic illness, or prevention encounters.

These concepts were introduced in the preclinical curriculum. Clinical training reinforces these concepts.

Objectives:

- Outline the role of the family physician and the specialty of family medicine in the structure and function of the United States health care system.
- Compare medical outcomes between countries with and without a primary care base.
- Compare the per-capita health care expenditures of the United States with other countries.
- Define the relationship of access to care and health disparities.

Rotation Schedule

	7 - 8	8 - 9	10 - 11	11 - 12	1 - 2	2 - 3	3 - 4	4 - 5
Monday	Enrollment of Newborns	Enrollment of Newborns	Post Natal Clinics	Post Natal Clinics	Enrollment of Chronic Disease Patients	Family Planning	Didactic Lectures/Home visit	SDL
Tuesday	Antenatal Clinic	Antenatal Clinic	Lab Services	Voluntary Counselling & Testing (VCT)	OPD	VCT	Didactic Lectures/Welfare Services	SDL
Wednesday	Chronic Disease Clinic	Chronic Disease Clinic	Lab Services	Didactic Lectures	Chronic Disease Clinic	Chronic Disease Clinic	Didactic Lectures	SDL
Thursday	Well Child Clinic	Well Child Clinic	VCT	Didactic Lectures/Welfare Services	Chronic Disease Clinic	VCT	Didactic Lectures/Welfare Services	SDL
Friday	Well Child Clinic	Well Child Clinic	Well Child Clinic	Didactic Lectures	OPD	OPD	OPD	SDL

**Please utilize the Use empty spaces below the greyed area for customization according to locale.*

Didactic Lecture

Week 1
Characteristics & Functions of the Family Physician
Well Adult Exam
Preventive Health Care <ul style="list-style-type: none"> • Family medicine, prevention & its definition • Evidence based practice • Assessment of screening test and counselling • Four-way approach of practice • Family physician as foundation of the public health system
Well Child Exam - Immunizations
Week 2
Evidence Based Medicine as Foundation for Prevention
Diagnosis of Pregnancy
GI <ul style="list-style-type: none"> • Acute Gastroenteritis • PUD, GERD
Week 3
Endocrinology <ul style="list-style-type: none"> • Diabetes mellitus • Thyroid (Goiter, hypo/hyper thyroidism) • Alcohol related diseases
Respiratory <ul style="list-style-type: none"> • Pharyngitis • Asthma • Respiratory infections
Cardiac <ul style="list-style-type: none"> • Chest pain • Hypertension • Congestive heart failure

Week 4
Musculoskeletal <ul style="list-style-type: none"> • Back pain • Joints (Gout, Osteoarthritis, Infectious)
Dermatology <ul style="list-style-type: none"> • Dermatitis (including acne) • Cellulitis
Women's Health <ul style="list-style-type: none"> • Family planning • Vaginitis • Dysmenorrhea • STI
Week 5
2. Male Reproductive Health <ul style="list-style-type: none"> • Benign prostatic hypertrophy • Prostate cancer • Erectile dysfunction
DRE
Nephrology <ul style="list-style-type: none"> • UTI • Nephrolithiasis
Diagnosis of Malnutrition (including Obesity)
Week 6
Child abuse
Substance use & abuse

Advisable Minimum Cases

		Observed (O)		Active Part. (A)		Performed (P)	
	Non-Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Iron deficiency anemia	5		5		5	
2	Well baby	5		5		5	
3	Prenatal	5		5		5	
4	Pneumonia	5		5		3	
5	Benign Prostatic Hypertrophy	3		3		0	
6	Diabetes	5		5		5	
7	Hypertension & CAD	5		5		5	
8	Malnutrition	5		5		5	
9	Depression	5		5		5	
10	Dermatitis	5		5		5	
11	Smoke cessation counselling/intervention	5		5		5	
12	Substance abuse counselling/intervention	5		5		0	
		Observed (O)		Assisted (A)		Performed (P)	
	Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Immunization	10		10		0	
2	VIA (Visual Inspection with Acetic Acid)	5		3		0	
3	Aspiration	3		1		1	
4	Wound irrigation/dressing	3		1		1	
5	IUDs, SubQ, injectables, cervical cap	5		5		0	
6	Compressive bandaging	2		2		1	
7	Suturing/Removal of sutures	5		5		5	
8	Breastfeeding support	5		5		5	
9	Digital Rectal Exam	5		5		0	
10	Breast Examination	5		5		0	

Appendix 6: Psychiatry Syllabi

Clerkship Objectives

At the end of the clerkship, the student should be able to:

1. Outline the scope of Psychiatry
2. Recognize differences between normal and abnormal behavior.
3. Develop a positive attitude towards mentally ill patients.
4. Recognize clinical manifestations of and diagnose common psychiatric disorders.
5. Plan the management of common psychiatric disorders.
6. Practice rational use of different modes of therapy in psychiatric disorders
7. Diagnose acute psychiatric emergencies and institute immediate remedial measures.
8. Assess psychosocial determinants of medical disorders.
9. Contribute to the promotion of positive mental health and prevention of psychiatric disorders.
10. Provide mental health care to the community and participate in community mental health programmes.
11. Request and interpret relevant Investigations related to Psychiatry.
12. Counsel, guide and explain the prognosis of the psychiatric disorders to the patient and the attendants.

Learning Outcome

GENERAL PSYCHIATRY

At the end of the course, the student should be able to:

- **Introduction to Psychiatry**
 - Differentiate between normal and abnormal behaviour
 - Classify psychiatric disorders
- **Clinical Evaluation**
 - Perform a Psychiatric interview.
 - Take detailed psychiatric case history and conduct mental status examination
 - Refer for relevant investigations including psychological testing.
 - Describe psychopathology.
 - Diagnose psychiatric disorders in a rational and systematic manner
- **Community Psychiatry**
 - Diagnose and manage common psychiatric disorders in the community.
 - Refer difficult cases to secondary or tertiary care center.

UNIT I - CLINICAL PSYCHIATRY

TOPICS

I. Psychiatric Disorders

Describe etiology, epidemiology, clinical manifestations and outline the principles of management of the following psychiatric disorders:

1. Organic mental disorders
2. Schizophrenia and related disorders.
3. Mood disorders
4. Anxiety disorders (Generalized anxiety disorder, Panic disorder, Phobic disorder).
5. Dissociative and somatoform disorders.
6. Obsessive compulsive disorder
7. Reaction to severe stress and adjustment disorders.
8. Neurasthenia and Depersonalization-derealization syndrome.
9. Non-organic sexual dysfunction.
10. Psycho-physiological disorders (Gastro-intestinal disorders, obesity, anorexia nervosa, cardio-vascular disorders, respiratory disorders, endocrine disorders, skin disorders, rheumatoid arthritis, headache, immune disorders, chronic pain).
11. Personality disorders.
12. Drug abuse.
13. Alcohol abuse.
14. Psychiatric disorders in childhood and adolescence.
15. Psychiatric disorders in geriatrics.
16. Emergency Psychiatry (Refer to Emergency Medicine)

II. Management

1. Describe pharmacology of commonly used psychotropic medicines.
2. Describe indications, contraindications and procedure of Electro-convulsive therapy.
3. Apply counselling skills.
4. Describe non-pharmacological methods of treatment in Psychiatry and in medical disorders.

UNIT II - PSYCHIATRY AND OTHERS SPECIALITIES

I. Forensic Psychiatry

The student should be able to describe legal and ethical issues in psychiatry

II. Consultation-liaison Psychiatry

The student should be able to utilize consultation-liaison psychiatry

III. Rehabilitation

The student should be able to plan rehabilitation for patients with chronic mental illness, mental retardation and substance abuse.

LEARNING EXPERIENCES

1. Clinical case presentations.
2. Small group case discussions.

3. Structured interaction sessions (Lectures)
4. Demonstration of skills
 - i. Psychiatric interview skills
 - ii. Skills to elicit psychopathology
 - iii. Counselling skills
5. Role play
6. Integrated Seminars

Rotation Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
<i>8:00 - 9:00 hrs.</i>	Ward rounds	Ward rounds	Ward rounds	Ward rounds	Ward rounds
<i>9:00 - 12:00 hrs.</i>	Clinic (Adult)	Clinic (Pediatric)	Clinic (Adult)	Clinic (Adult)	Teaching activities
<i>12:00 - 13:00 hrs.</i>	Lunch	Lunch	Lunch	Lunch	Lunch
	SDL	SDL	SDL	SDL	SDL
CLASSROOM ACTIVITIES					
<i>13:00 - 15:00 hrs.</i>		Conference		Conference	
Week 1	Revision of Cases for Presentation	Mental Status Examination (MSE)	Case Discussion	Psychotic Disorders	Quiz Mental Status Examination
Week 2	Revision of Cases for Presentation	Personality Disorders	Case Discussion	Mood Disorders Adjustment Disorder	Quiz Psychotic Disorders
Week 3	Revision of Cases for Presentation	Anxiety Disorders Eating Disorders	Case Discussion	Substance-induced Psychotic Disorders	Quiz Personality Disorders
Week 4	Revision of Cases for Presentation	Psychopharmacology 1	Case Discussion	Psychopharmacology 2	Quiz Mood Disorders
Week 5	Revision of Cases for Presentation	Suicide	Student Presentation	Student Presentation	Quiz Psychopharmacology
Week 6	Student Presentation	Student Presentation	Student Presentation	Student Presentation	FINAL EXAMINATION

Didactic Lecture

Week 1
Lecture
Introduction & classification of Psychiatric disorders
Neurophysiology & neuroanatomy
Aetiology of Psychiatric disorders.
Week 2
The Psychiatric history & mental status examination
Schizophrenia & other psychotic disorders.
Bipolar disorders
Depression
Week 3
Anxiety disorders
Personality disorders
Somatoform & factitious disorders
Week 4
Alcohol & substance related disorders
Suicidal behavior
Psychiatric disorders of childhood & adolescence
Psychological testing
Week 5
Intellectual disability
Psychological & biological therapies
Stress management
Week 6
Clinical Psychopharmacology
Forensic psychiatry
Ethics

ADVISABLE MINIMUM CASES

		Observed (O)		Active Participation		Co-Managed/Managed (M)	
	Non-Procedural	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Major Depressive Disorder/Episode/Dysthymia	5		5		5	
2	Anxiety Disorders	5		5		5	
3	Eating Disorder	2		2		0	
4	Bipolar Disorder	3		3		3	
5	Substance Abuse Disorder	5		5		5	
6	Schizophrenia	3		3		3	
7	Mood Disorder - NOS and Secondary	2		2		2	
8	Attention Deficit & Disruptive Behavior Disorder & Learning Disorders	2		2		2	
9	Dementia & Alzheimer's Disease	1		1		1	
10	Personality Disorder	1		1		1	
11	Mental Retardation	1		1		1	
		Observed (O)		Assisted (A)		Performed (P)	
	Procedures	Min. Cases	Actual Seen	Min. Cases	Actual Done	Min. Cases	Actual Done
1	Mental Status Examination	5		5		5	
2	Treat plan	5		5		5	

APPENDIX 7: Clinical Forms

Clinical Rotation Documentation Checklist

Student Name: _____ Student ID: _____

Hospital/Clinic: _____ Preceptor: _____

Date Started: _____ Date Ended: _____ Total Weeks: _____

	Clinical Documentation	Required	Responsible Person	Tick if completed
1	End Rotation Course Evaluation	1	Student	
2	Clinical Competence Grade Sheet a. Mid – Rotation Assessment b. End- Rotation Assessment	1	Preceptor	
3	Clinical Case Studies (Submit with Logbook)	1	Student	
4	Advisable Minimum Cases Sheet	1	Student	
5	Rotations Log-sheet (Include additional pages if required)		Student	
6	End Rotation Student Evaluation	1	Clinical Office	
7	Logbook Acknowledgement Receipt (Office)	1	Clinical Coordinator	

Note: It is student's responsibility to complete the above requirements in its entirety with integrity and honesty. Students shall have this evaluated by her/his attending, and submit the same to the clinical department. Failure to do so will result in receiving poor grade in the specific clinical rotation on the transcript.

Student Signature: _____

Date: _____

CLINICAL COMPETENCE GRADE SHEET: **Mid-Rotation Assessment**

The milestones for clerkship students are arranged in columns of progressive stages of competence that best describe a student's current performance. Raters shall select a box that best represents the summary performance for that sub-competency.

- Selecting a response box in the middle of a column implies that the student has demonstrated those milestones.
- Selecting a response box on a line in between columns indicates that milestones in the preceding column have been demonstrated, as well as initial or partial demonstration of milestones in the subsequent column.
- Any individual Educational Program Objective (EPO) (detailed in the rows beneath the competency heading) with a rating of <2.0 **indicates significant concern**.
- **Narrative Comments** pertaining to the assessment criteria must be included in the comments section

Student name: _____

Rotation Name: _____

Evaluator Name: _____

Competency Areas & Educational Program Objectives	Does Not Meet Expectations <i>Functioning below expected level of training for a clerkship student</i>	Meets Expectations <i>Functioning at the expected level of training for a clerkship student</i>	Exceeds Expectations <i>Functioning above the expected level of training for a clerkship student</i>	Not Observed
PATIENT CARE (PC1)				
<i>Demonstrate History & PE</i>	Obtain inaccurate or incomplete history. Performs an unorganized or incomplete physical exam. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes most information; Performs an organized, complete exam. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes all information. Performs an organized, complete exam in a timely manner. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Explain and interpret diagnostic test</i>	Is unable to identify or explain clinically relevant test and/ or diagnostic procedures. Incorrectly interpret results <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Identifies and explains clinically relevant test and/ or diagnostic <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes all information. Performs an organized, complete exam in a timely manner. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Create a management plan</i>	Develop a non-patient centered management plan <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Develops a patient-centered management plan <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Develops a patient-centered management plan. Also explains the rationale. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Collaborate with team members (PC4, PC7)</i>	Works in isolation, only collaborates when requested <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Effectively communicates and collaborates with team members <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Also provides coordinated care centered on individual patient <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
COMMUNICATION (PC4)				
<i>Document and present patient information</i>	Provides inaccurate and unorganized presentation of findings, written notes are unclear <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Provides accurate and organized presentation of findings, written notes are clear <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Also, presentation of findings is succinct and notes have limited errors <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	

NARRATIVE COMMENT:

<p><i>Encouraged health/ wellness, create ethical relationship</i></p>	<p>Is inattentive or provides unclear instructions and explanations to patients and families</p> <p>1.0 1.5 2.0 2.5 S</p>	<p>Is attentive and provides clear instructions and explanations to patients and families</p>	<p>Also checks for patient and family understanding by asking open-ended questions to patients</p>	
<p>PROFESSIONALISM (PC5)</p>				
<p><i>Show integrity, accountability, responsiveness, and balance of self-care</i></p>	<p>Is unaccepting of responsibility for own actions or is unable to successfully balance time commitments. Ignores duty hour limits and self-care</p> <p>1.0 1.5 2.0 2.5 3.0</p>	<p>Accepts responsibility for own actions; successfully balance time commitments. Complies with patient hand off expectations (when applicable) and duty hour limitations.</p>	<p>Also completes responsibilities without the need for reminders or explicit directions; Acknowledge contributions of others</p>	
<p><i>Demonstrate sensitivity, empathy, respect for others</i></p>	<p>Is insensitive or not empathetic toward others. Displays disrespectful behaviors and is not accepting of others</p> <p>1.0 1.5 2.0 2.5 3.0</p>	<p>Is sensitive and empathetic toward others. Displays respectful behaviors and conveys acceptance of others</p>	<p>Also considers patients' beliefs, values, and cultural practices in patient care plans</p>	
<p><i>Maintains a teachable attitude, is prepared & engaged</i></p>	<p>Responds in a defensive manner to feedback, or is not willing to learn. Is unprepared, arrives late, or does not obtain approval for absence or tardiness</p> <p>1.0 1.5 2.0 2.5 3.0</p>	<p>Responds openly to feedback, but does not solicit it, and is willing to learn. Is prepared, arrives on time, or is late and obtains approval for tardiness</p>	<p>Initiates giving & receiving feedback. Incorporates feedback for improvement. Is on time</p>	
<p>QUALITY IMPROVEMENT (PC8)</p>				
<p><i>Recognizes limitations, admits errors</i></p>	<p>Struggles instead of acknowledging limitations/ Obstacles. Is unable to identify plan to change</p> <p>1.0 1.5 2.0 2.5 3.0</p>	<p>Aknowledges limitations/ obstacles. Identifies a plan to change limitations or resources needed</p>	<p>Also demonstrate improvement in self- identified limited area(s)</p>	
<p><i>Access, Appraise, Evidence (PC6, PC3)</i></p>	<p>Consider non-evidence-based findings to their approach</p> <p>1.0 1.5 2.0 2.5 3.0</p>	<p>Appraises evidence-based findings to their approach to patients</p>	<p>Applies these findings to their approach to patient</p>	

MEDICAL KNOWLEDGE (PC1, PC8)						
<i>Application of medical knowledge</i>	Demonstrate limited medical knowledge for clerkship student; relies heavily on resources <input type="radio"/> 1.0	<input type="radio"/> 1.5	Demonstrates appropriate medical knowledge for clerkship student, relies somewhat on resources <input type="radio"/> 2.0	<input type="radio"/> 2.5	Applies medical knowledge by interpreting patient's symptoms for formulate care plan <input type="radio"/> 3.0	
SOCIAL AWARENESS (PC3, PC6)						
<i>Aware of cost & resource allocation</i>	Is unaware of external factors which may influence utilization and act as barriers to cost-effective care <input type="radio"/> 1.0	<input type="radio"/> 1.5	Is aware of external factors which may influence utilization and act as barriers to cost-effective care <input type="radio"/> 2.0	<input type="radio"/> 2.5	Also actively works to identify the mitigation of barriers <input type="radio"/> 3.0	
<i>Recognized roles & responsibility of all team members (PC7, PC5)</i>	Is unaware of physician and others' roles/ responsibilities in offering preventive care. <input type="radio"/> 1.0	<input type="radio"/> 1.5	Identifies physician and others' roles and responsibilities in offering preventive care. <input type="radio"/> 2.0	<input type="radio"/> 2.5	Also recognizes the roles of other team members and seeks their input <input type="radio"/> 3.0	
<i>Acquire knowledge about community resources, educate others</i>	Is unaware of relevant community based resources <input type="radio"/> 1.0	<input type="radio"/> 1.5	Is knowledgeable of or seeks information about relevant community based resources <input type="radio"/> 2.0	<input type="radio"/> 2.5	Also helps identify relevant community-based resources and educate others. <input type="radio"/> 3.0	

Student Signature: _____
Faculty Name: _____
Faculty Signature: _____ Date: _____

CLINICAL COMPETENCE GRADE SHEET: **End-Rotation Assessment**

The milestones for clerkship students are arranged in columns of progressive stages of competence that best describe a student's current performance. Raters shall select a box that best represents the summary performance for that sub-competency.

- Selecting a response box in the middle of a column implies that the student has demonstrated those milestones.
- Selecting a response box on a line in between columns indicates that milestones in the preceding column have been demonstrated, as well as initial or partial demonstration of milestones in the subsequent column.
- Any individual Educational Program Objective (EPO) (detailed in the rows beneath the competency heading) with a rating of <2.0 **indicates significant concern**.
- **Narrative Comments** pertaining to the assessment criteria must be included in the comments section

Student name: _____

Rotation Name: _____

Evaluator Name: _____

Competency Areas & Educational Program Objectives	Does Not Meet Expectations <i>Functioning below expected level of training for a clerkship student</i>	Meets Expectations <i>Functioning at the expected level of training for a clerkship student</i>	Exceeds Expectations <i>Functioning above the expected level of training for a clerkship student</i>	Not Observed
PATIENT CARE (PC1)				
<i>Demonstrate History & PE</i>	Obtain inaccurate or incomplete history. Performs an unorganized or incomplete physical exam. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes most information; Performs an organized, complete exam. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes all information. Performs an organized, complete exam in a timely manner. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Explain and interpret diagnostic test</i>	Is unable to identify or explain clinically relevant test and/ or diagnostic procedures. Incorrectly interpret results <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Identifies and explains clinically relevant test and/ or diagnostic <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Obtains an accurate history that includes all information. Performs an organized, complete exam in a timely manner. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Create a management plan</i>	Develop a non-patient centered management plan <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Develops a patient-centered management plan <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Develops a patient-centered management plan. Also explains the rationale. <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
<i>Collaborate with team members (PC4, PC7)</i>	Works in isolation, only collaborates when requested <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Effectively communicates and collaborates with team members <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Also provides coordinated care centered on individual patient <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	
COMMUNICATION (PC4)				
<i>Document and present patient information</i>	Provides inaccurate and unorganized presentation of findings, written notes are unclear <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Provides accurate and organized presentation of findings, written notes are clear <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	Also, presentation of findings is succinct and notes have limited errors <div style="display: flex; justify-content: space-around; width: 100%;"> 1.0 1.5 2.0 2.5 3.0 </div>	

<i>Encouraged health/wellness, create ethical relationship</i>	Is inattentive or provides unclear instructions and explanations to patients and families <p style="text-align: center;">1.0</p>	Is attentive and provides clear instructions and explanations to patients and families <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>		
PROFESSIONALISM (PC5)							
<i>Show integrity, accountability, responsiveness, and balance of self-care</i>	Is unaccepting of responsibility for own actions or is unable to successfully balance time commitments. Ignores duty hour limits and self-care <p style="text-align: center;">1.0</p>	Accepts responsibility for own actions; successfully balance time commitments. Complies with patient hand off expectations (when applicable) and duty hour limitations. <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>	without the need for reminders or explicit directions; Acknowledge contributions of others	
<i>Demonstrate sensitivity, empathy, respect for others</i>	Is insensitive or not empathetic toward others. Displays disrespectful behaviors and is not accepting of others <p style="text-align: center;">1.0</p>	Is sensitive and empathetic toward others. Displays respectful behaviors and conveys acceptance of others <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>	Also considers patients' beliefs, values, and cultural practices in patient care plans	
<i>Maintains a teachable attitude, is prepared & engaged</i>	Responds in a defensive manner to feedback, or is not willing to learn. Is unprepared, arrives late, or does not obtain approval for absence or tardiness <p style="text-align: center;">1.0</p>	Responds openly to feedback, but does not solicit it, and is willing to learn. Is prepared, arrives on time, or is late and obtains approval for tardiness <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>	Initiates giving & receiving feedback. Incorporates feedback for improvement. Is on time	
QUALITY IMPROVEMENT (PC8)							
<i>Recognizes limitations, admits errors</i>	Struggles instead of acknowledging limitations/ Obstacles. Is unable to identify plan to change <p style="text-align: center;">1.0</p>	Aknowledges limitations/ obstacles. Identifies a plan to change limitations or resources needed <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>	Also demonstrate improvement in self- identified limited area(s)	
<i>Access, Appraise, Evidence (PC6, PC3)</i>	Consider non-evidence-based findings to their approach <p style="text-align: center;">1.0</p>	Appraises evidence-based findings to their approach to patients <p style="text-align: center;">1.5</p>	<p style="text-align: center;">2.0</p>	<p style="text-align: center;">2.5</p>	<p style="text-align: center;">3.0</p>	Applies these findings to their approach to patient	

NARRATIVE COMMENT:

MEDICAL KNOWLEDGE (PC1, PC8)						
<i>Application of medical knowledge</i>	Demonstrate limited medical knowledge for clerkship student; relies heavily on resources 1.0	1.5	Demonstrates appropriate medical knowledge for clerkship student, relies somewhat on resources 2.0	2.5	Applies medical knowledge by interpreting patient's symptoms for formulate care plan 3.0	
SOCIETAL AWARENESS (PC3, PC6)						
<i>Aware of cost & resource allocation</i>	Is unaware of external factors which may influence utilization and act as barriers to cost-effective care 1.0	1.5	Is aware of external factors which may influence utilization and act as barriers to cost-effective care 2.0	2.5	Also actively works to identify the mitigation of barriers 3.0	
<i>Recognized roles & responsibility of all team members (PC7, PC5)</i>	Is unaware of physician and others' roles/ responsibilities in offering preventive care. 1.0	1.5	Identifies physician and others' roles and responsibilities in offering preventive care. 2.0	2.5	Also recognizes the roles of other team members and seeks their input 3.0	
<i>Acquire knowledge about community resources, educate others</i>	Is unaware of relevant community based resources 1.0	1.5	Is knowledgeable of or seeks information about relevant community based resources 2.0	2.5	Also helps identify relevant community-based resources and educate others. 3.0	

Student Signature: _____
Faculty Name: _____
Faculty Signature: _____ Date: _____

Student Evaluation of Clerkship

	Outstanding	Competent	Satisfactory	Need to Improve	Inadequate
- Identify the common surgical problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Obtain a proper relevant history.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Perform general, systemic and local examinations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Consider the differential diagnosis and complications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Arrive at a logical provisional diagnosis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Requisition relevant cost effective investigations in order to establish the diagnosis and plan treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Interpret laboratory Investigation results, skiagram of common surgical diseases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Plan and institute line of treatment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Employ life saving measures in life threatening conditions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Develop habit of rational use of drugs including antibiotics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Provide first aid and refer patients with complicated surgical problems to centres equipped to handle them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Obtain informed consent for any examination / procedure. Please carry out medical examination of a female in presence of lady attendant/another patient/husband	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Develop cordial attitude towards patients, colleagues and other staff. Practise soft skills with patients, colleagues and other staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Act in a manner befitting a doctor and communicate sympathetically while dealing with an incurable disease and/or a dead/dying patient.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Demonstrate leadership qualities, promote team spirit, and be able to play a meaningful role in disaster preparedness and management.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
- Adopt universal precautions for self-protection against HIV and hepatitis and counsel patients.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Student Evaluation of Preceptor

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The clinical faculty/preceptor stimulated my interest in the subject.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The clinical faculty/preceptor managed hospital time and pace well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The clinical faculty/preceptor is regular in reporting to class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The clinical faculty/preceptor was organized and prepared for every clinical activity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The clinical faculty/preceptor encouraged discussions and responded to questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The clinical faculty/preceptor communicates clearly in oral and written forms that I could understand his point	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The clinical faculty/preceptor demonstrated in-depth knowledge of the subject/procedure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The clinical faculty/preceptor used a variety of instructional methods to reach the course objectives (e.g. group discussions, student presentations, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The clinical faculty/preceptor was accessible throughout the rotation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Information about the assessment was communicated clearly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Clinical faculty/preceptor gave guidance on where to find resources.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Clinical faculty/preceptor explained the grading criteria of the course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How can your clinical faculty/preceptor further improve the delivery of the course content?

Clinical Skills Evaluation Sheet



Texila American University

CLINICAL SKILL EVALUATION SHEET

Student Name: _____ Date: _____

Faculty Evaluator: _____

Patient Problem/Diagnosis: _____

Setting (Please choose one):

Ambulatory

Inpatient

Emergency Department

Other

Patient: Age: _____ Gender: _____

Complexity (Please choose one):

Low

Moderate

High

Choose one numerical rating for each category below.

	NOT OBSERVED	UNSATISFACTORY									EXCELLENT		
1 Medical Interviewing Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
2 Physical Examination Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
3 Humanistic Qualities and Professionalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
4 Clinical Judgment and Reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
5 Communication Skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
6 Organization/Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			
7 Overall Clinical Competence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1	2	3	4	5	6	7	8	9			

Positives

Needs improvement

Signature of Faculty Evaluator

Texila American University

Signature of Student