PRIME MODULE

MBBS

PRIME MODULE
Study guide

Abstract

The PRIME (professionalism, patient safety, and communication skills, research, identity formation, management and leadership, and ethics) is an innovative curricular theme developed by the Institute of Health Professions Education & Research of the Khyber Medical University to develop future doctors who can serve the society with utmost care and empathy. The module is vertically placed for all 5 years of MBBS training which includes the disciplines of behavioral sciences, medical education, and research (to be taught by the discipline of community medicine. The module also included the subjects of Islamic studies and Pakistan studies that is meant for developing the identity as a Muslim and a Pakistani respectively before developing the identity as a medical professional. The document presented here includes the topics, learning objectives, placement of the topics in different years and their hours' distribution as well as assessment methods. The first part of the module study guide shows the general learning outcomes while the second part describes the detailed learning objectives and table of specification.

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Part 1
Learning objectives

Professionalism & Behavioral Sciences

A) General learning outcomes

At the end of final year, the MBBS Students will be able to:

1. define professionalism in various perspectives and list the key attributes of professionalism.

2. demonstrate caring attitude for the patients.

3. display honor and integrity in their characters.

4. practice reflective writing such as portfolio.

5. communicate skillfully in breaking bad news.

6. address conflicts, anger and stress situations.

7. effectively counsel patients for life styles modifications.

8. practice a character of high values, self-respect and self-regulation.

9. act as positive role models in their practice.

B) Specific learning objectives

   a) **Students will be able to define professionalism in various perspectives and list key attributes of professionalism**

1. Students will be able to recognize and discuss the dynamics of trust in health professional-patient relationship.

2. Students will be able to differentiate between altruism and fiduciary.

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3. Students will be able to discriminate between empathy and sympathy.

4. Students will be able to identify their roles in terms of professional identity.

   b) <u>Students will be able to demonstrate caring attitude for the patients</u>

5. Students will be able to serve the patient as an individual, taking into account lifestyle, beliefs and support system.

6. Displays professional behavior while dealing with patients suffering from debilitating diseases, and their families.

7. Students will be able to demonstrate empathy in patient-health professional interaction.

8. Students will be able to identify the health care needs of community.

   c) <u>Students will be able to display honor, self-respect and integrity in their characters</u>

9. Acts honestly in dealing with patients.

10. Adheres to principles of trust in day to day professional interactions.

11. Avoids misuse of power for personal gains.

12. Accept errors and mistakes in responsible manner.

13. Practice discretely and appropriately while dealing with confidential information.

    d) <u>Students will be able to practice reflective writing such as portfolio</u>

14. Identifies his own strengths and weaknesses.

15. Display appropriate emotional and social intelligence.

16. Prepare personal development plan and reflective portfolios.

17. Analyze critically his personal development plan.

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e) Students will be able to communicate skillfully in breaking bad news

18. Develops counselling skills in professional life

<u>Communication Skills</u>

A) General learning Outcomes

The student would be able to;

1. Apply general principles of good communication
2. Communicate with patients / relatives with empathy
3. Communicate with colleagues
4. Communicate as a teacher
5. Communicate as a patient advocate
6. Communicate with media and press

B) Specific learning objectives

By the end of this course, students would be able to;

   a) Apply general principles of good communication
1) Listen to the patients about their health problems by communicating very clearly and with respect.

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    i. Receive patients with respect

   ii. Listen to the patient's problems

  iii. Discuss with the patients regarding health problems available management options

      b) Demonstrate the ability to solve problems keeping in view the individual and cultural differences.

    i. Shows the ability to solve problems

   ii. display sensitivity towards individual and cultural differences keeping in view the principles of equality and equity

2) Integrate new ideas, models and can actively participate in different academic discussions.

    i. Display team work in group activities for creativity and problem solving

   ii. Share with administration on matters one feels sensitive about

3) Accept responsibility for professional and ethical behavior.

    i. display privacy and confidentiality of the patients keeping in view

   ii. Adhere to professional behavior while dealing with patients

4) Exhibit professional behavior while breaking the bad news

    i. Inform the patients in empathetic and responsible manners about their health

   ii. display sensitivity in breaking bad news

5) Deal appropriately with violent and vulnerable patients in clinical environments.

    i. Demonstrate ability to deal difficult patients such as psychiatrics and aggressive

   ii. Knowing the art of dealing with vulnerable groups such as children, elders, handicapped and women, etc.

6) Communicate with patients / relatives with empathy.

a. Listen to and educate the patients about their health problems by communicating very clearly and with respect, even in breaking the bad news.

    i. Receive patients with respect

    ii. Listen to the patient's problem

    iii. Listen to others with respect.

    iv. Listen for and remember the name of newly Introduced people.

    v. Educate the patient regarding the health problem, available choices, management plan, self-care, and use of prescribed drugs and equipment,

    vi. Clear, effective and sensitive communication for breaking bad

    vii. News.

    viii. Deal with an angry or violent patients, difficult circumstances, and vulnerable patients.

    ix. Advise patients on lifestyle modification

7) Communicate with colleagues

a. Demonstrate sensible attitude in problem solving keeping in view the individual and cultural differences.

b. Demonstrates belief in the democratic process.

c. Is sensitive towards individual and cultural differences (value diversity).

d. Shows the ability to solve problems.

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e. Cooperates in group activities (displays teamwork)

f. Informs management on matters that one feels strongly about.

8) Communicate as a peer-teacher

a. Competent enough, to present new ideas, models and can actively participate in different class discussions

b. Participates in class discussions.

c. Gives a presentation.

d. Questions new ideals, concepts, models, etc. in order to fully understand them.

9) communicate as a patient advocate

a) Show commitment to accept responsibility for his behavior in professional and ethical way.

b) Recognizes the need for balance between freedom and responsible behavior.

c) Accepts responsibility for one's behavior.

d) Explains the role of systematic planning in solving problems.

e) Accepts professional ethical standards.

f) Proposes a plan to social improvement and follows through with commitment.

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10) Communicate with media and press

   a) Be sensitive and clear enough to know the intricacies of breaking the bad news, and is able to deal with violent, vulnerable and in difficult situations.

   b) Know the safety rules and practices them.

   c) Recognizes the need for balance between freedom and responsible behavior.

Research Methods, Statistics, and Proposal Development

A) General Learning outcomes

At the end of year 5, the MBBS students will be able to;

1. Identify a researchable problem and critically review literature
2. Phrase succinct research questions and formulate hypotheses
3. Identify the appropriate research design(s) in social sciences
4. Identify the appropriate scientific methods underpinning the research designs
5. Collect, analyze and evaluate data, and present results where possible
6. Demonstrate ethics in conducting research and in ownership of intellectual property

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Contents

Research Methods

1. Background, concepts, uses.
2. Tools required for qualitative (focus groups, documentary analysis, interviews and observations) and quantitative research (surveys, questionnaires, experiments etc.)
3. Basic measurements in epidemiology (morbidity, mortality, disability and fatality).

Learning objectives

Students should be able to conduct simple analysis of quantitative and qualitative data that include:

1) Quantitative:

   a. Data and its types

   b. Rates, ratios and proportions

   c. Crude, specific and standardized rates.

2) Qualitative:
   a. Thematic analysis
   b. Focus group interviews

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Proposal Development

1. Literature Review (Background, keywords)

2. Title, Rationale, Purpose

3. Developing a Research Question

4. Developing Objectives

5. Operational Definitions

6. Hypothesis

7. Materials and Methods

    a. Study Design

    b. Study Setting

    c. Study Duration

    d. Sample Size

    e. Sampling Technique

    f. Sample Selection

        i. Inclusion Criteria

        ii. Exclusion Criteria

8. Data Collection Procedures

9. Data Analysis Procedures

10. Bibliography and Referencing

11. Types and examples of Variables

Leadership and Management

General outcomes

At the end of year 5, the MBBS student will be able to;

1. Practice **principles of leadership** in an organizational setup

2. **Motivate** groups to achieve common targets and shared vision

3. Demonstrate character and values necessary to lead groups with **ethical practices**

4. Use **critical thinking** and reasoning in problem solving

5. Construct effective teams and organizational structures

6. Persuade people to **positively work** in right direction

7. Develop **strategic approach** for various situations

8. Display **visionary approach** for better health care

9. Create **vision** for better health care

Specific learning objectives

By the end of year 5, the MBBS students will be able to;

1. Define and differentiate between leadership and management

2. Describe different attributes and styles of leader in their context

3. Compare different models of leadership and management.

4. Demonstrate self-management skills

5. Apply different motivational skills for team members

6. Apply critical thinking skills to different problems

7. Analyze situations and apply ethical principals

8. Demonstrate positive attitude in different environments

9. Exhibit positive attitude and outlook in workplace environment,

10. Practice emotionally intelligent behavior to deal with different situations

11. Willing to work with other people and team members for maintenance and improvement of performance

12. Willingness to assist and bring change of the system in right direction

13. respect the leadership and management role of other team members and non-medical colleagues.

14. Describe and design organizational hierarchical structures

15. Perform SWOT analysis for a particular task

16. Describe different strategy developing approaches

17. Develop strategies for given scenarios

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18. Delegate powers to juniors and team mates

19. Display visionary approach for health care situations

20. Raising and acting on concerns

21. Participate confidently in a problem and choose to act in the most proper leadership style.

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Part 2
Table of Specification

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Year 1

Topic	Contents	Learning Objectives	Teaching Method	Module	Hours	Assessment
A) Behavioral sciences						
Model of healthcare	Bio-Psycho-Social model of health care	Describe Bio-Psycho-Social model of health care	Lecture/ Group Discussion	Foundation 1	1	MCQs and Formative
	Health and behavioral sciences	Correlate health with Behavioral sciences. Describe Important of behavioral sciences in health.	Lecture/ Group Discussion	Foundation 1	1	MCQ and Formative
Affective domain	attitude	Describe Attitudes in health professionals. Describe factors affecting it.	Lecture/ Group Discussion	Foundation 1	1	MCQ and Formative
	Attention and concentration	Define attention and concentration. What factor affect them?	Lecture/ Group Discussion	Blood 1	1	MCQ and Formative
	Personality	Define personality.	Lecture/ Group Discussion	MSK1	1	MCQ and Formative

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		Describe factor affect personality development				
	Motivation	Define motivation and describe the types of motivation	Lecture/ Group Discussion	MSK 1	1	MCQ and Formative
Stress	Stress and its management	Define and classify stress and stressors. Describe relationship of stress and stressor with illness. Describe the concept of life events and their relationship with stress and illness.	Lecture/ Group Discussion	MSK 1	1	MCQ and Formative
	Coping skills and Defense mechanism	Describe the concepts of adjustment and maladjustment? explain coping skills and describe the psychological defense mechanisms	Lecture/ Group Discussion	MSK 1	1	MCQ and Formative
B) Professionalism						
Introduction duction to Professionalism	Definition of a professionalism, behavior's, attitudes, emotions, and their attributes	Define Professionalism, and its attributes	Lectures/Group discussion	Foundation 1	2	MCQ, SAQ,

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Dynamics of Professionalism	Trust definition, its attributes, and components, and its' application	Dynamics of trust in health professional-patient relationship	Lecture Role Play Workplace	Foundation 1	1	Formative
Attributes of prof	Differences between empathy and sympathy	Discriminate between empathy and sympathy	Lecture/ Group discussion/ Role play	MSK 1	2	MCQ, SEQ, and Formative
Prof identity formation	White coat ceremony Types, multiple identities, Components, Professional identity formation	Students' roles in terms of professional identity	White coat ceremony	Foundation 1	2	Formative
Attributes	Accept errors and mistakes in responsible manner	Accept errors and mistakes in responsible manner	Lecture	CVS1	2	Formative
PIF	Identifies his own strengths and weaknesses	Identifies his own strengths and weaknesses	Lecture/Group discussion/Role Play	Foundation 1	1	Formative Portfolio
Emotional intelligence	Emotional and social intelligence in given contexts	Describe & Display appropriate emotional and social intelligence	Lecture/Group discussion/Role Play	Blood 1	2	Formative

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Personal Development Plan (PDP)	Personal development plan & reflective portfolios	Prepare personal development plan & reflective portfolios	Lecture/ Group Discussion	Foundation 1	2	Assignment
PDP	Peer feedback session on PDP	Analyze critically his personal development plan (PDP)	Group Discussion among peers	MSK 1	2	Formative
Social accountability	Describe social accountability	Definition, types, components, theoretical background	Lecture	Respiration 1	2	MCQ
C) Communication skills						
Cultural sensitivity	Concepts of Equality and Equity, Cultural sensitivities.	Display sensitivity towards individual and cultural differences keeping in view the principles of equality and equity	Lecture equity, equality/Role play,	Blood 1	1	Continuous Formative
Teamwork	Dynamics of Teamwork	Display team work in group activities for creativity and problem solving	Role play,	SGTs in first year	2	Formative

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Communicating with administration	Share with administration on matters one feels sensitive about	Communicating with administration	DME Orientation session /Role play	Foundation 1	3	Formative
Confidentiality	Confidentiality of colleagues and patients Appropriate use of social media	Ensuring confidentiality	Lecture/Role play / Group Discussion	Blood 1	1	continuous Formative
Communicate as a peer-teacher	Recognizing the limits of one's knowledge and skills; and to ensure the accuracy of teaching content delivered to others	Knowing limitations	Lecture /Group Discussion,	MSK 1	2	continuous Formative
	Evaluating the quality of teaching	Understanding of methods to evaluate the effectiveness and quality of teaching	Lecture/Group Discussion	Foundation 1	1	

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	Evaluating the quality of teaching and quality of teaching	Understanding of methods to evaluate the effectiveness and quality of teaching	Lecture/Group Discussion	Foundation 1	1	continuous Formative
Communicate with media and press	Use of Social media/blogs for communication Communicating with Media and Press	Understanding of who should give information to the media and press and what form it should take, including the need to maintain confidentiality where individual patients are concerned	Lecture/Group Discussion, Role Play	MSK 1	2	Continuous Formative
D) Leadership and Management						
Introduction duction	Definition of a leader & manager Differences between leadership and management	Differentiate between leadership and management	Lecture	Orientation session of foundation 1	1	MCQ, SAQ
	What is self-management? Its importance.				1	

Self-management skills	Self-management Mechanisms	Demonstrate self-management skills	Task	foundation 1		Continuous Formative
	Attributes and style of leadership	Describe different attributes and styles of leader in their own cultural context	Lecture/ Group Discussion	Respiratory 1	2	MCQs Formative
E) Ethics						
Ethical principles	Ethical principles. (Autonomy, Beneficence, Non-maleficence, Justice)	Explain the pillars of medical ethics and their application in different situations	Lecture/Group Discussion	foundation 1	1	MCQ, Formative
F) Research						
Introduction duction	Background, concepts, uses. Definition of medical research Need of medical research	Describe the background and purpose of research.	Lecture/ Group Discussion	Foundation 1	1	MCQs
Types of Research	Types of Research & Epidemiological methods (descriptive, analytic and experimental).	Explain different types of research.	Lecture/ Group Discussion	Foundation 1	1	MCQs

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Formulation of Research Question	Importance of Research Question in starting research Scope of research question Study design implications for research question Describe how to develop a research question.	formulate research question	Lecture/ Group Discussion	Foundation 1	1	MCQs Assignment
Research objectives Hypothesis	Developing Objectives and hypothesis	Write research objectives for a research study. Develop hypothesis for a study. Select a study design for a study.	Lecture/ Group Discussion	Foundation 1	2	MCQs Assignment
Literature Search	Literature Review (Background, keywords)	Describe techniques of literature search and review. conduct literature search to finalize the research question using Boolean logic	Lecture/ Group Discussion	Blood 1	4	MCQs Assignments
Title, Rationale, Purpose	Title, Rationale, Purpose	Explain the process of title selection for a research study.	Lecture/ Group Discussion	Blood 1	2	MCQs Assignment

		Describe the purpose and justification of any selected title.				
Operational Definitions	Operational Definitions	Describe Operational Definitions	Lecture/ Group Discussion	Blood 1	1	MCQs Assignment

<table>
<tr><td colspan="7" style="text-align:center; color:white; background:darkred;">Year 2</td></tr>
<tr><td colspan="7" style="text-align:center;">A)   Professionalism and Behavioral sciences</td></tr>
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Dealing with patients	Culture, Life style, and Belief System in the society	Serve the patient as an individual, considering lifestyle, beliefs and support system	Lecture	Neurosciences 1A	2	Formative
Power Dynamics	Power dynamics, bullying, harassment, its influences on interrelationships	Avoids misuse of power for personal gains	Lecture Group Discussion/ Role Play	Neurosciences 1A	1	Formative
Social accountability	Definition and concept of social accountability	Describe the concept of social accountability	Lecture/ Small group Teaching	Neurosciences 1B	1	MCQ

Mental illness	Definition, types, components, theoretical background	Define mental illness, its importance, impact, and prevention	Lecture/ Small group Teaching	Neuroscience IB	1	MCQ and formative
Social psychology, health & terrorism	Definition, types, components, theoretical background	Describe social psychology, and its relation on health and terrorism	Lecture	Neurosciences IB	1	MCQ and formative
Stigma and reactions to illness	Stigma and reactions to illness, Strategies for not being judgmental	Describe Stigma and reactions to illness, and how not to be judgmental	Lecture	GIT	1	MCQ and formative
B) Communication Skills						
Verbal and non-verbal communication skills	Verbal and non-verbal communication skills	Develop and Demonstrate effective verbal and non-verbal communication skills	Role play, Group Discussion	GIT 1/ Renal 1	0.5	MCQ and Continuous Formative OSPE
Listening skills	Listening skills	Develop and demonstrate active listening skills for learning purposes and to the patient's problems	Role play, Group Discussion	GIT1/ Renal 1	0.5	MCQ and Continuous Formative OSPE
Reading skills	Reading skills	Develop and demonstrate effective reading skills	Role play, Group Discussion	GIT 1/ Renal 1	0.5	MCQ and Continuous Formative

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						OSPE
C) Research						
Qualitative research methodology	Introduction duction to qualitative research methodology	Describe qualitative research methodology.	Lecture/ Group Discussion	Neurosciences (IB)	3	MCQs/Assignment
Sample size	Sample Size Calculation	Calculate sample size for different research projects. Calculate sample size for a specific research project.	Lecture and Hands on Exercise in Computer lab	GIT 1	1	MCQs/Assignment
Sampling techniques and sample selection	Probability and non-probability Sampling techniques Sample Selection i. Inclusion Criteria ii. Exclusion Criteria	Describe various sampling techniques. Justify sampling techniques chosen for a specific research project. Select sample for a specific research project	Lecture/ Group Discussion	Renal 1	1	MCQs/Assignment

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Designing of a Questionnaire	Steps for making a questionnaire	design a questionnaire. Identify validated questionnaire	Lecture/ Group Discussion	Renal 1	2	MCQ and Assignment
Data Collection Procedures	Data Collection Procedures	Discuss procedure of data collection for your study.	Lecture/ Group Discussion	Endocrine 1	2	MCQ and Assignment
Ethical Review	Ethical principles for medical research application for ethical approval	Describe ethical principles for the purpose of medical research.	Lecture	Endocrine 1	1	MCQ and Assignment
Plagiarism	Definition, Types, Strategies to avoid it	Describe plagiarism and how to avoid it	Lecture/ Group Discussion	Reproduction 1	1	MCQ and formative
D) Management and Leadership						
Models of Leadership and management	Models of leadership & management	Compare different models of leadership and management	Lecture /group discussion	Endocrine 1/ Reproduction 1	1	MCQs

Year 3

A) Professionalism and Behavioral sciences

Dynamics of professionalism	Trust definition, its attributes, and components, and its' application	Dynamics of trust in health professional-patient relationship	Workplace	Foundation 2	2	Formative
Attributes of professionalism	Differences between empathy and sympathy	Discriminate between empathy and sympathy	group discussion/ Role play	Infection and inflammation	2	MCQ, SAQ and Formative
Professional identity formation	Types, multiple identities	Students' roles in terms of professional identity	Group Discussion/ Role Play	Foundation 2		Formative
Attributes of professionalism	Empathy levels & its application	Demonstrate empathy in patient-health professional interaction	Group Discussion and Role Play	MSK2	1	MCQ, SAQ Formative

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	Principles of trust in daily work activities	Adheres to principles of trust in day-to-day professional interactions	Group Discussion/ Role Play	Foundation 2	2	Formative
B) Communication skills						
Counselling skills	Counselling skills	Develops counselling skills in professional life	Lecture/Group Discussion	CVS-2	2	Formative
Dealing with patient	Patient reception, and respect	Receive patients with respect	Role play, Group Discussion	Foundation 2	1	Continuous Formative
Listening skills	Listening skills	Listen to the patient's problems	Role play, Group Discussion	MSK 2	1	Continuous Formative
Communicating with administration	Communicating with administration	Share with administration on matters one feels sensitive about	Role play, Hospital teaching	Foundation 2	3	Continuous Formative
Principles of ethics	Privacy and confidentiality of the patients, Medico-legal and cultural aspects	Display privacy and confidentiality of the patients keeping in view a-cultural traits b- medico-legal law cases	Role play, Hospital teaching	Blood 2	3	Continuous Formative

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dealing with patients	Professional behavior while dealing with patients	Adhere to professional behavior while dealing with patients	Group Discussion, Hospital teaching	Respiratory 2	2	Continuous Formative
	Answering to patient queries	Answering questions and giving explanations and/or instructions	Role play, Group Discussion	Respiratory- 2	1	Continuous Formative
Informed consent	Informed consent Special Situations	Obtaining informed consent	Lecture Bedside teaching	CVS -2	2	Continuous Formative
Confidentiality	Confidentiality of colleagues and patients Appropriate use of social media	Ensuring confidentiality	Lecture/Role play, Group Discussion	Blood 2	2	Continuous Formative
Communicate as a peer-teacher	Knowing limitations	Recognizing the limits of one's knowledge and skills; and to ensure the accuracy of teaching content delivered to others	Group Discussion, Hospital teaching	MSK 2	2	Continuous Formative

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Motivation	Motivation. Team working	Explain motivational skills for team members for clinical tasks	Small group/team based	Foundation 2	2	Formative
Positive attitude	Positive attitude processes	Exhibit positive attitude and outlook in workplace environment	Bedside/community Visit	CVS-2	2	Formative
C) Leadership and Management						
SWOT Analysis	SWOT Analysis	Perform SWOT analysis for a particular task	Group Discussion	CVS 2	1	MCQ, SAQ, Formative
Power dynamics	Power dynamics Power and empower	Delegate powers to juniors and team mates	Lecture, and Role Play	Respiratory 2	1	MCQ, SAQ, Formative
D) Research						
Purpose and process of health research	Background, concepts, uses. Definition of medical research	1.1 Define and categorize types of health research Explain the purpose of health research	Teaching method	Foundation 2	2	MCQ

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	Need of medical research Broad overview of the different types of research (qualitative, quantitative ,mixed methods and the common research methods/design used in each					
	Steps of research process	Explain the steps involved in the research process	lecture	Infection and inflammation	1	MCQ
Identifying study question	Brainstorming for identifying a research topic. Selecting a general topic Narrowing from a broad general topic to a more specific focused area of research	Develop a list and mind map of possible research topics	Lecture/SGD	Infection and inflammation	2	Assignment
Literature review	Types of literature review	Elaborate the types of literature review	Hands on	Infection and inflammation		Assignment

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	Strategies of literature review	Explain the strategies for literature search	Hands on	Infection and inflammation		Assignment
	Search engines and their limitations such as google, google scholar ,PubMed Databases for thesis ,abstracts, full text article Difference between the various sources of information Selecting information for academic writing	2.2 Select a single topic of interest from the list 2.3 Review the literature	Lecture/SGD Small group discussion	Infection and inflammation	2	Assignment
	Academic reading and writing	Explain the art of academic writing				
	Evidence table	Develop an evidence table				
	Research question	Formulate / refine research question from gaps from evidence table				
Referencing	Bibliography Intacts (secondary citation Mandeley / zotero	Differentiate between references, citation & bibliography List different styles of referencing	Lecture Self-directed learning	Multisystem module	1	MCQ

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		Select appropriate referencing style for research project.				
	Explore and practice free reference software Zotero for referencing(open access)	4.5 Apply referencing software to word document	Lecture Small group format	Multisystem module	2	Assignment
Academic Reading and writing and Plagiarism	Grammarly		Practical Small group discussion Practical	Blood 2	2	MCQ
Academic integrity		Define academic integrity. Define plagiarism. Explain how to avoid plagiarism. List and explain software used to check plagiarism.				

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		Develop writing skills with Grammarly checker				
Proposal writing	Guidelines and Templates for proposal writing /synopsis writing	Write a proposal for research project using KMU or CPSP guidelines or any other standard guidelines		MSK 2	7	Assignment (develop a literature review and synopsis for your topic of interest)
GANTT Chart	How to make a GANTT Chart	Make a GANTT Chart for a research project	Hands-on exercise in computer lab	CVS 2	1	MCQ and Assignment

Year 4

A) Professionalism and Behavioral sciences

Dealing with patients	Culture, Lifestyle, and Belief System in the society	Serve the patient as an individual, considering lifestyle, beliefs, and support system	Group Discussion/ Role Play	Endocrine and reproduction 2	2	Formative
Community Need analysis (approaches to professionalism)	Needs analysis & SWOT analysis	Identify the health care needs of community	Lecture/ Group Discussion	Renal endocrine and reproduction	1	MCQ, SAQ

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Power Dynamics	Power dynamics, bullying, harassment, its influences on interrelationships	Avoids misuse of power for personal gains	Lecture/ Group Discussion/role play	NEUROSCIENCES-2	1	Formative portfolio
Emotional intelligence	Emotional and social intelligence in given contexts	Describe & Display appropriate emotional and social intelligence	Group Discussion/role play	Neurosciences 2	2	Formative
social accountability	Simulated situations	Differentiate between different social accountability issues	Group discussion/Role play	GIT Hepatobiliary and metabolism 2	2	
B) Communication skills						
Conflict resolution	Problem solving skills	Show the ability to solve problems regarding difficult patients/attendant.	Group discussion/Role play	Neurosciences 2	2	Continuous Formative
dealing with patients	Dealing with difficult patients	Demonstrate ability to deal difficult patients such as psychiatrics and aggressive	Group discussion/Role play	Medicine	1	Continuous Formative

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Dealing with vulnerable groups	Knowing the art of dealing with vulnerable groups such as children, elders, handicapped and women.	Dealing with vulnerable groups	Group discussion/Role play	Paeds/Gyanae	1	Continuous Formative
Counselling/breaking bad news	Educating patients and facilitating self-management of illness	Explain the concept of SPICES model of breaking bad news	Role play, Hospital teaching	Endocrine and Reproductive health	1	Continuous Formative
C) Leadership and Management						
Emotional intelligence	Practice in an emotionally intelligent manner in different situations	Emotional intelligence	Practical/ bedside	ENT	2	Formative
Creativity and innovation in leadership	Dynamics of Healthcare situations	Display visionary approach for health care situations	Group Discussion and Role play	Eye	1	SAQ, and Formative
Conflict management	Conflict management	Raising and acting on concerns	Group Discussion and Role Play	ENT	1	SAQ, and Formative

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confidentiality	Maintaining confidentiality	Participate confidently in a problem and choose to act in the most proper leadership style	Group Discussion and Role Play	Blood 2	1	SAQ, and Formative
D) Research and biostatistics						
Epidemiology	Introduction	Define epidemiology	LGF	NS-2	1	
		Explain the basic concepts of epidemiology				
	Study design	Classify and elaborate study designs	LGF	NS-2	1	
	Screening	Explain the screening in epidemiology	LGF	NS-2	1	
	Measures of mortality and morbidity	Explain the measures of morbidity and mortality	LGF	NS-2	1	
Biostatistics	Introduction to biostatistics	Describe the significance of biostatistics in health and epidemiology	SGD	BLOCK 1	2Hrs	

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	Data and variable types	Define and classify variables				
Sampling	Sampling	Define sampling	LGF	Block 1	1 hr	
		Discuss types of sampling				
Bias	Biases in epidemiological studies	Define Bias Discuss different types of biasis Discuss ,how bias can be prevented	LGF	Block 1	1 hrs	
Measures of central tendency	Measures of central tendency	Classify measures of central tendency	LGF	Block 1	1 hr	
		Calculate measures of central tendency				
		Interpret and signify the results				

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		Describe the advantages and disadvantages of different measures				
Measures of dispersion	Measures of dispersion	Classify measures of dispersion	LGF	Block 1	1 hr	
		Calculate measures of dispersion				
		Interpret the results of measures of dispersion				
		Explain the advantages and disadvantages of measures of dispersion				
		Explain the use of different measures in specific circumstances				
Normal distribution	Normal distribution	Define normal distribution	LGF	Block 1	1 hr	

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		Describe normal distribution				
		Calculate and graphically represent normal distribution				
		Explain it's use & significance in relation to data				
		Describe percentile and interquartile range				
		Calculate and depict percentile and interquartile range				
		Explain use and significance of these in different situations				

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Confidence Interval, Confidence level, Standard error	Confidence interval, Confidence level, standard error	Define confidence level and interval	LGF	Block 1	1 Hr	
		Describe confidence level and interval				
		Calculate confidence level and interval				
		Explain their use and significance in different situations				
P value, critical region, rejection region, alpha beta errors	P value, critical region, rejection region, α β errors	Define P value, critical region, rejection region, α β errors	SGD	Block 1	2 hrs	

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		Describe P value, critical region, rejection region, α β errors				
		Calculate P value, critical region, rejection region, α β errors				
		Describe their use and significance in different situations				
Z test & it's appkication, Types / shapes of frequency distribution	'z' test & it's application in hypothesis testing, applications of parametric and non parametric tests	Define & Describe 'z' test	LGF	Block 1	1 hr	
		Describe it's use in different statistical settings				
		Calculate 'z' test				

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		Explain it's application in hypothesis testing				
		Interpret and apply to clinical settings				
		Discuss various shapes of frequency distribution				
		Describe the applications of parametric and non parametric tests				
T test & it's application	t' test & it's application in hypothesis testing, degree of freedom	Define & Describe 't' test	LGF	Block 1	1 hr	
		Explain it's use in different statistical settings				
		Calculate 't' test				

		Describe it's application in hypothesis testing				
		Interpret and apply to clinical settings				
		Calculate degree of freedom				
Chi square test & it's application	Chi square & it's application in hypothesis testing	Describe 'x^2' test	LGF	Block 1	1 hr	
		Describe it's use in different statistical settings				
		Calculate 'x^2' test				
		Explain it's application in hypothesis testing				
		Interpret and apply to clinical settings				

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Correlation, regression	Correlation, regression,	Describe Correlation & Regression	LGF	Block 1	1 Hr	
		Interpret and apply to clinical settings				
Transformation for not normal distribution	Transformations for Not Normal distributions	Know the use of Transformations for Not Normal distributions				
Referencing						
Practical Problems in biostat		Practical problems in biostat		SGD	2Hrs	
Data analysis	Data analysis Hands on		Use of MS Excel for data analysis	SGD	2 HRS	
			Use of SPSS for data analysis	3x SGD	6hrs	

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			Use of Endnote for reference management	SGD	2hr	
			Data compilation, analysis and dissertation writing	4xSGD	8 hrs	

<table>
<tr><td colspan="7" align="center">Final Year</td></tr>
<tr><td colspan="7" align="center">A)   Communication skills</td></tr>
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Counseling	Case discussions on health problems and their management	Discuss with the patients regarding health problems and available management options	Role play, Group Discussion	Medicine	1	Continuous Formative
Cultural sensitivity	Concepts of Equality and Equity, Cultural sensitivities.	Display sensitivity towards individual and cultural differences keeping in view the principles of equality and equity	Role play, Hospital teaching			
				Gynae	2	Continuous Formative

Counseling	Empathetic communication with patients	Inform the patients in empathetic and responsible manners about their health	Group Discussion, Hospital teaching	Surgery	2	Continuous Formative
Breaking the bad news	Breaking the bad news	Display sensitivity in breaking bad news	Group Discussion	Medicine	1	Continuous Formative
Informed consent	Informed consent Special Situations	Obtaining informed consent	Lecture Bedside teaching	surgery	2	Continuous Formative
Communicate with colleagues	Oral and written communication (daily progress report) with colleagues. Subjective, objective, assessment, plan (SOAP) (bedside teaching)	Passing on and sharing information orally, in writing and electronically	Role play, Hospital teaching	Peads /surgery	2	

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Communicate with colleagues	Writing patient referral to colleagues. Setting, background, assessment, recommendation (SBAR protocol)	Writing a good management summary and patient referral	Role play, Hospital teaching	Medicine	1	Continuous Formative
Communicate with colleagues	Providing all necessary clinical information on request forms to laboratory-based colleagues	Filling lab investigation forms	Role play, Hospital teaching	Surgery	1	
Communicate as a peer-teacher	Communicating complex information in different settings	Conveying complex information to others, individually or in groups, in a variety of settings and using a range of teaching tools and presentation aids	Group Discussion, Hospital teaching	Medicine	1	Continuous Formative
Communicate as a patient advocate	Patient Advocacy	Recognizing when patient advocacy is appropriate and how it may be accomplished effectively	Group Discussion, Role Play	Paeds/Gynae	2	Continuous Formative
Communicate with media and press	Use of Social media/blogs for communication	Understanding of who should give information to the media and				Continuous Formative

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	Communicating with Media and Press	press and what form it should take, including the need to maintain confidentiality where individual patients are concerned	Group Discussion, Role Play	Surgery	2	
B) Leadership and Management						
Team work	Strategies to Improve performance	Willing to work with other people and team members for maintenance and improvement of performance	Role Play	Surgery	2	Formative
Change management	Change management	Willingness to assist and bring change of the system in right direction	Lecture and Role play	Gynae	1	MCQ, SAQ, and Formative
Dealing with colleagues	. Respect for colleagues	Be able to respect the leadership and management role of other team members	Role Play	Surgery	1	Formative
3- Healthcare quality and patient safety						
Organization structure of	Organizational types, hierarchies, and cultures	Describe organizational hierarchical structures	Lecture	Foundation-3	1	SAQ, Formative

health care system						
Patient safety	Medical errors	Describe the types of medical errors	Lecture	Foundation-3	1	MCQ/formative
		Describe the means and ways to avoid diagnostic errors	Lecture	Foundation-3		MCQ/formative
	System errors	Describe system errors with examples	Lecture	Foundation-3		MCQ/formative
		Describe the methods of avoiding system errors using the Swiss cheese model	Lecture	Foundation-3		MCQ/formative
	Critical incidents report	Describe the basic concepts of critical incident reports	Lecture	Foundation-3		MCQ/formative
Patient records	Daily progress reports	Describe the SOAP format of writing DPRs	Lecture/Bed side teaching	Foundation-3	1	MCQ/formative

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	Patient referrals and discharge summaries	Describe the SBAR protocol for patient referrals and discharge	Lecture/Bed side teaching	Foundation-3		MCQ/formative
Evidence based medicine and evidence based medical practice	EBM	Describe the concept of EBM in clinical practice	Lecture	Foundation-3	1	MCQ/formative
		Elaborate the different levels of evidence	Lecture	Foundation-3		MCQ/formative
		Emphasize the role of RCT, meta-analysis and systematic review in EBM	Lecture	Foundation-3		MCQ/formative

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