



DEPARTMENT OF ANESTHESIA  
STUDY GUIDE  
MBBS YEAR V  
2020-2021



BAQAI MEDICAL COLLEGE  
BAQAI MEDICAL UNIVERSITY

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## VISION & MISSION

### Baqai Medical University Vision Statement:

Baqai Medical University is a community based and community oriented center of excellence striving to mold students to become competent and caring health professionals, groomed to be social leaders capable of improving health, education and socioeconomic well-being locally, nationally and globally.

### Baqai Medical University Mission Statement:

The mission of Baqai Medical College is to be recognized as a center of excellence in education, research, patient care and community services by producing highly capable and knowledgeable professionals

### Baqai Medical College Vision Statement:

Our vision is to enhance the access and excellence in medical education and research, with the aim of capacity building of students and faculty through innovations, and science and technology competencies, to achieve rapid and sustainable health. The medical graduate thus produced will be informed and trained enough to serve the community better, and to be advisor to the national and international health organizations.

### Baqai Medical College Mission Statement:

The mission of the Baqai medical college is to produce medical graduates, who are accomplished individuals and have skills for problem solving, clinical judgment, research & leadership for medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.

## Outcomes of the MBBS Program

By the end of five years MBBS program, The Baqai Medical College graduate will be able to:

- Write and report focused history, perform physical examination, formulate a diagnosis and management plan for common health problems.
- Utilize knowledge of basic and clinical sciences for patient care.
- Apply evidence-based practices for protecting, maintaining and promoting the health of individuals, families and community.
- Identify problems, critically review literature, conduct research and disseminate knowledge
- Lead other team members as per situational needs for quality health service.
- Acquire professional behaviours that embodies lifelong learning, altruism, empathy and cultural sensitivity in provision health care service.

## POLICIES AND PROCEDURES

Code of Conduct and Maintenance of Discipline of Students Regulations  
Under section 25(e) BMU Act.1996

All University students shall be under the full disciplinary control of the University. No students shall be allowed to participate in politics. The action against the act of indiscipline shall include fines, debarring from attending class and cancellation of admission, depending on the gravity of indiscipline.

The following shall constitute acts of indiscipline for which action may be taken against the student or students:

- (a) Breach of any rule public morals, such as:
  - Use of indecent or filthy language;
  - Use of immodest dress;
  - Use of undesirable remarks or gestures; and

- Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.
- (b) Defiance of authority
  - (c) Action, defamatory of and derogatory to Islam
  - (d) Immorality
  - (e) Being found under the effect of an intoxicant or misuse of drugs including marijuana, LSD dope and other opioids.
  - (f) False personation or giving false information or willful suppression of information, cheating or deceiving.
  - (g) Inciting or staging a walk-out, a strike or an unauthorized procession.
  - (h) Shouting of slogans derogatory to the prestige of the University or the reputation of its officers or teachers.
  - (i) Visiting without a pass places which are not to be visited without a pass.
  - (j) Visiting places declared out of bounds for students

Every student must carry his / her Identity Card which will be open to examination and will be demanded at the time of entrance to the various University Faculties and functions.

No. student will be admitted to the facilities of the library, transport or the canteen unless he /she is in possession of the Identity Card

# INTRODUCTION TO ANESTHESIA

Introduction to the subject of Anesthesia and critical care.

Concept of anesthesia and critical care.

Provision of knowledge of induction, maintenance and postoperative care in view of reducing perioperative morbidity and mortality.

Provision of knowledge regarding anesthesia problems and its management.

## NAMES OF THE MODULAR COMMITTEE

S. No.	NAME	DESIGNATION
1	Dr. Murtaza Sheikh	Asst. professor
2	Dr. Tariq Mughal	Asst. professor
3	Dr. Nailazahoor	Senior registrar
4	Dr. Ayesha Masood	Senior registrar

## OUTCOMES OF Anesthesia COURSE:

The Baqai University graduate of the MBBS program will be able to:

1. Utilize knowledge of basic and clinical sciences for patient perioperative care.
2. Focused history, perform physical examination; formulate a management.
3. Identify problems, critically review literature, conduct research and disseminate knowledge.
4. Lead other team members as per situational needs for quality health service.
5. Apply evidence based practices for protecting, maintaining and promoting the health of individuals, families and community.

### COMPETENCY:

By the end of course, the student should:

- Show responsible and compassionate behavior with the patient and family, considering the cultural, social and economic background, and in dealing with all levels of education and abilities.
- Use the required communication skills for taking appropriate clinical history and conducting clinical examination.
- Appreciate the role of perfect understanding of basic science (anatomy, physiology, pathology, etc.) And the pathophysiological process relevant to anesthesia practice, in diagnosis and management of common illness in patient and community.
- Have the knowledge and skills necessary to identify the health problems of a patient in emergency situations, common critical conditions.
- learning in a problem based style.

#### a. Knowledge and skills to be acquired

By the end of this course the students should be able to:

- 1) Explain to the patient, honestly and in simple terms, the anesthetic concepts of disease and surgical interventions.
- 2) Take full medical history, with appropriate sequence and comprehensiveness in ot, write it in a clear presentable way for others to read and understand.
- 3) Asked to examine a patient; prepare the appropriate setup for physical examination, carry out the examination in appropriate manner, sequence



and comprehensiveness of all systems, relevant to surgical problems, write his notes in a clear way for others.

- 4) Presented with any of the following real, verbal or written emergency problems; perform or suggest urgent lifesaving procedures, diagnose, manage or suggest steps of effective management of these conditions: multiple injured patients, shock, bleeding patient, coma, chest pain, cardiac arrest, convulsions, respiratory distress ,septicaemia.

#### COGNITIVE SKILLS:

By the end of this course the student should be able to:

- 1) Take a detailed history from a patient.
- 2) Perform a complete physical examination of a patient.
- 3) Present summary of the assigned case to a faculty member during preoperative assesment.

The final outcomes in anesthesia rotations include the following:

- To recognize and understand common I conditions
- To recognize and understand emergency surgical presentations
- To be aware of what treatment possibilities are available, including non-operative
- To understand the principles of preoperative optimization
- To understand postoperative complications
- To understand the types and risks of anesthetic procedures
- To be able to explain in general terms to a patient the implications of a common surgical diagnosis
- To have sufficient basic understanding of surgery to help with future career choice

#### COURSE DESIGN:

The training requirements are divided into 2 main categories which differ as regards methods of training and evaluation:

- 1) Theoretical part: which include:

Lectures: The formal lecture schedule is delivered by consultants within their own discipline and takes the form of didactic lectures. The subject matter of the lecture is circulated in advance so the students can prepare it.

Tutorials & seminars: Students are assigned to a 'rotating tutorial' group and receive tutorials throughout the different tutors within the area of anesthesia. A fixed topic is usually discussed by the tutors and as such they function as an adjunct to the formal lecture schedule delivered. Students are attached to anesthesia groups throughout the course and receive regular tutorials from the

members of these groups in addition to the above mentioned tutorials, as detailed in the individual team timetables.

### Clinical attachments

Operating theater: It is the stage in which practice integrated knowledge with skills, observing the process starting by calling pt. to shift him back to ward. Be on time for each case. You should arrive with the patient or even before. Cases typically start at 8:30, you are not expected to be on time to the first case as you have class, but you are expected to show up after you finish up your morning lecture. Try to meet the patient preoperatively in the pre-care; you need to be diligent about checking on the room and the patient in the holding area.

### LECTURES FOR THE FINAL YEAR MBBS STUDENTS

ROTATION DAYS: 10

HOURS TOTAL 50

5 HOURS PER DAY(2hours for theoretical knowledge)(3 hours for clinical round in OR)

- 1.ANESTHETIC EQUIPMENT AND MOINTORS
- 2.PHARMACOLOGY OF IV ANAESTHETIC DRUGS
3. PHARMACOLOGY OF INHALATIONAL AGENTS
- 4.GENERAL ANESTHESIA MANAGEMENT
- 5.REGIONAL ANESTHESIA AND PAIN
- 6.ACID BASE MANAGEMENT
- 7.FLUID AND ELECTROLYTE BALANCE
- 8.BLOOD COMPONENT THERAPY
- 9.POSTANESTHEIA CARE
- 10.ANESTHESIA COMPLICATIONS

## LEARNING OBJECTIVES

AT THE END OF DAY OF ROTATION(5 HOURS) STUDENT SHOULD BE ABLE TO

<b>ANESTHESIA EQUIPMENT AND MONITORS</b>
<ul style="list-style-type: none"><li>• identify the equipment</li><li>• classify the monitors</li></ul>
<ul style="list-style-type: none"><li>• interpret the values of vitals on monitors</li><li>• explain problems and basic management</li></ul>
<b>pharmacology of iv anesthetic agent mechanism of action</b>
<ul style="list-style-type: none"><li>• classify drugs</li></ul>

<ul style="list-style-type: none"> <li>• knows mechanism of action</li> <li>• define hemodynamic effect</li> <li>• explain dose of common agents atleast 3</li> </ul>
<b>pharmacology of inhalational agents</b>
<ul style="list-style-type: none"> <li>• classify agents used</li> <li>• knows hemodynamic effects</li> <li>• define mac</li> </ul>
<b>GENERAL ANESTHESIA MANAGEMENT</b>
<ul style="list-style-type: none"> <li>• induction method</li> <li>• Define maintenace of anesthesia</li> <li>• explain recovery</li> </ul>
<b>REGIONAL ANESTHESIA</b>
<ul style="list-style-type: none"> <li>• regional anesthesia</li> <li>• knows spinal and epidural methods</li> <li>• anatomy of spinal space</li> </ul>
<b>ACID BASE BALANCE</b>
<ul style="list-style-type: none"> <li>• explain acidosis</li> <li>• knows alkalosis</li> <li>• classify causes</li> <li>• Acid BASE BALANCE</li> </ul>
<b>FLUID ELECTROLYTES</b>
<ul style="list-style-type: none"> <li>• explain hyponatremia and hypernatremia</li> <li>• knows hypokalemia and hyperkalemia</li> <li>• clasify rehydration solutions atleast one</li> <li>• FLUID ELECTROLYTES</li> </ul>
<b>BLOOD COMPONENT THERAPY</b>
<ul style="list-style-type: none"> <li>• define hemorrhage</li> <li>• explain anemia</li> <li>• knows thrombocytopeina</li> </ul>
<b>POSTANESTHESIA CARE UNIT</b>
<ul style="list-style-type: none"> <li>• AT the end of day 9 student should be able to</li> <li>• define aldrete recovery score</li> <li>• explain parametres of discharge</li> <li>• clasify recovery room issues</li> </ul>
<b>10. ANESTHESIA COMPLICATIONS</b>
<ul style="list-style-type: none"> <li>• define hypoxia</li> <li>• explain co2 distubances</li> <li>• knows causes of cardiac arrest</li> </ul>

## Email IDs

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Dr.naila: [nailazahoorawan86@gmail.com](mailto:nailazahoorawan86@gmail.com)

Dr Ayesha: aieshamasud@gmail.com

## Reference books:

**Morgan and Mikhail's book of anesthesiology**

**Aitkenhead book of anesthesiology**

**Anesthesia tutorial of the week.**