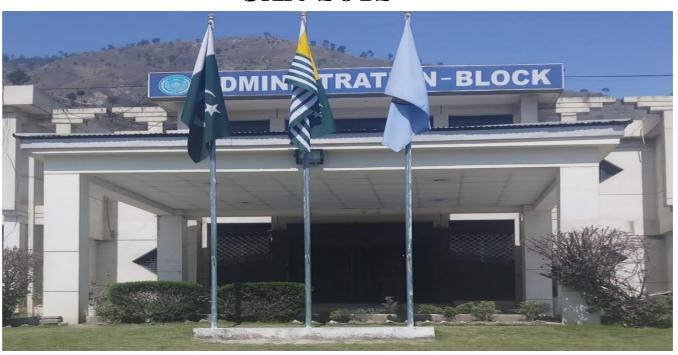# FACULTY OF HEALTH & MEDICAL SCIENCES
INSTITUTE OF ALLIED HEALTH SCIENCES

CURRICULUM

BS SURGICAL & OPERATION THEATRE
Technology

JAN 2012

AZAD JAMMU & KASHMIR UNIVERSITY
MUZAFFARABAD

Associate Dean
Dr. Bashir ur Rehman

Dean's welcome

Dear students and prospective students.

I welcome you wholeheartedly to the Faculty of Health and Medical Sciences at the University of Azad Jammu & Kashmir.

The surgical technologist is a highly trained medical professional and an essential member of the operating room team, which most commonly include surgeons, anesthesiologists, and circulating nurses. The primary function of the surgical technologist is to ensure that the operating room or environment is safe, that equipment function properly, and that the operative procedure is conducted under conditions that maximize patient safety.

Our four years Bachelor of Science program is tailored to equip you with knowledge, skills and attitudes that will make you a competent surgical technologist. You will learn how to prepare the operating room by setting up surgical instruments and equipment sterile drapes, and sterile solutions and how to prepare the patient for surgery including preoperative assessment escorting to the operating room positioning on the operating table and covering with sterile surgical drapes.

You will also be trained on how to assist surgeons during surgery, including passing instruments and other sterile supplies to surgeons, holding retractors, cutting sutures, and counting sponges, needles, supplies, and instruments. You will also be able to prepare, care for , and dispose of specimens taken for laboratory analysis and help apply dressings. You will be trained on how to operate sterilizers, lights, and suction machines and how to help operate diagnostic equipment.

Finally, you will learn post operative procedures including transferring patients to the recovery room, cleaning and restocking the operating room and provision of post operative patient care. After completing the course you will be of fered a professional Bachelor of Sciences degree, which qualifies you to work as surgical technologist. We have designed the course in a way that offers you the most interactive, informal and encouraging environment conducive to learning. You will be encouraged to thank critically, to seek knowledge yourself and to translate theory into practice.

Our curriculum is based on the art and science of helping you learn. The principles of our educational philosophy are that you are self directed learners have rich experiences and knowledge on which to draw, desire to learn to better handle real life situations, and see education as a process that increases competence and leads to achievement of your full potential.

Last but not least, every facility that makes you enjoy learning shall be at your disposal.

I am confident that you will excel in this program and wish you all the best.

Dr. Bashir Ur Rehman

Associate Dean, Faculty of Health & Medical Sciences

Objectives & Curriculum

The surgical Technology program at the Faculty of Health and Medical Sciences is a four year bachelor of Sciences degree program that offers the student an opportunity to develop the technical ability, knowledge and skills required for entry level employment in any surgical setting, hospital operating room or free standing healthcare facility, as a member of the surgical team.

The goal of the course is to prepare surgical technologists who are highly competent in the knowledge, skills and professional demeanor consistent with local employer expectations and professional standards. The specific objective of the program is to produce surgical technologists with the capabilities to:

- Function safely, effectively and efficiently and exhibit ethical behavior in a surgical technologist role,
- Apply basic scientific principles related to anatomy, physiology and Pathophysiology for safe transfer, positioning , prepping and draping of surgical patients,
- Describe actions and uses of anesthetic and pharmacological agents in the care of surgical patients,
- Apply knowledge of interpersonal skills and communications relative to procedures and protocols from a surgical technologist's perspective when working with patients, patients significant others, colleagues and other members of a healthcare team, as well as other members of the community,
- Apply principles of asepsis in an operating room setting and
- Demonstrate appropriate use and care of basic and specialty instruments and supplies

The curriculum is designed to prepare students to work anywhere in Pakistan as highly qualified radiologic Technicians. In this regard, the curriculum meets international standards in surgical technology certification and ensures that students masters world class performance competencies.

Subject are taught over eight semesters, the duration of each semester is 20 weeks. A maximum of 18 credits can be obtained in a single semester. The Bachelor of Science in surgical technology is awarded when the student accumulates a total of 168 credits.

In the fourth study year students are required to complete an eight weeks practicum of surgical technology in an accredited institution, attend particular honors seminars, undertake independent research and write an honors thesis in a major subject.

Title of Degree: BS SURGICAL & OPERATION THEATRE Technology

Minimum Duration: 08 semesters
First four semesters on Campus
Last four semesters in Teaching Hospitals

Total Duration: 08-12 semesters

Total Credit Hours: 124 credit hours

SCHEME OF STUDIES
BS SURGICAL & OPERATION THEATRE TECHNOLOGY

1st Semester

Code	Course Title	Credit Hour
BMT-3101	Anatomy– I	3 (2 + 1)
BMT-3102	Physiology – I	3 (2 + 1)
BMT-3103	Biochemistry – I	3 (2 + 1)
BMT-3104	Microbiology – I	3 (2 + 1)
BMT-3105	Pakistan Studies	3 (3 + 0)
BMT-3106	Introduction to Computer & IT	3 (3 + 0)
Total Credit Hours		**18**

2nd Semester

Code	Course Title	Credit Hour
BMT-3201	Pathology	3 (3 + 0)
BMT-3202	Anatomy– II	3 (2 + 1)
BMT-3203	Physiology – II	3 (2 + 1)
BMT-3204	Biochemistry – II	3 (2 + 1)
BMT-3205	Microbiology – II	3 (2 + 1)
BMT-3206	Islamic Studies	3 (3 + 0)
Total Credit Hours		**18**

3rd Semester

Code	Course Title	Credit Hour
BMT-4301	Pathology – II	3 (2 + 1)
BMT-4302	Pharmacology – I	3 (2 + 1)
BMT-4303	Emergency Medicine	3 (3 + 0)
BMT-4304	Critical Care – I	3 (2 + 1)
BMT-4305	Arabic	3 (3 + 0)
Total Credit Hours		**15**

4th Semester

Code	Course Title	Credit Hour
BMT-4401	Pharmacology – II	3 (2 + 1)
BMT-4402	Critical Care – II	3 (2 + 1)
BMT-4403	Emergency Medicine-II	3 (3 + 0)
BMT-4404	Applied Physics and Engineering Sciences	3 (2 + 1)
BMT-4405	Epidemiology and Biostatistics	2 (2 + 0)
BMT-4406	English Communication Skill	2 (2 + 0)
Total Credit Hours		**16**

BS SURGICAL & OPERATION THEATRE TECHNOLOGY

5th Semester

Code	Course Title	Credit Hour
BMT-5551	Sterilization and Disinfection	4 (3 + 1)
BMT-5552	Operation Theatre Equipment & Instruments-I	3 (2 + 1)
BMT-5553	Instruments for Emergency Procedures	4 (3 + 1)
BMT-5554	Operation Theatre Technology-I	4 (3 + 1)
Total Credit Hours		**15**

6th Semester

Code	Course Title	Credit Hour
BMT-5651	Instruments for Elective Procedure	3 (2 + 1)
BMT-5652	Operation Theatre Equipment & Instruments-II	3 (2 + 1)
BMT-5653	Suture Materials	3 (2 + 1)
BMT-5654	Fluids	3 (2 + 1)
BMT-5655	Infection Control	3 (2 + 1)
Total Credit Hours		**15**

7th Semester

Code	Course Title	Credit Hour
BMT-6751	Operation Theatre Technology-II	4 (3 + 1)
BMT-6752	Medical & Surgical Emergencies in OT	4 (3 + 1)
BMT-6753	Antiseptic Solutions	4 (3 + 1)
BMT-6754	Clinical Practicum	3 (0 + 3)
Total Credit Hours		**15**

8th Semester

Code	Course Title	Credit Hour
BMT-6851	Medical Statistics & Research Methods	3 (2 + 1)
BMT-6852	Research Project (Thesis)	3 (0 + 3)
BMT-6853	Clinical Practicum	3 (0 + 3)
BMT-6854	Pre & Post-Operative Assessment and Management	4 (3 + 1)
BMT-6855	Introduction to Biomedical Ethics	3 (3 + 0)
Total Credit Hours		**16**