SPECIALIST IN BLOOD BANK TECHNOLOGY (SBB)

SBB 701 Blood Products and Donor Management (Units: 2)
Prerequisite: Restricted to Specialist in Blood Bank Technology students.

Examine major foundational principles and practices of modern blood banking, including donor eligibility and screening; blood collection procedures, component processing and storage, and infectious disease testing; blood transfusion indications and contraindications; and quality control measures used to ensure the safety and integrity of blood products. (Plus-minus letter grade only)

SBB 702 Blood Group Systems and Transfusion Immunology/Physiology (Units: 3)
Prerequisite: Restricted to Specialist in Blood Bank Technology students.

Explore the major blood group systems, basic antigen-antibody reactions, immunogenicity, and their role in transfusion compatibility with emphasis on blood group genetics and biochemistry, including clinical relevance to transfusion and transplantation. Introduction to immunologic and physiologic principles underlying antigen expression, immune response, and transfusion outcomes to support immunohematology practice. (Plus-minus letter grade only)

SBB 703 Serologic and Molecular Testing in Blood Banking (Units: 3)
Prerequisites: Restricted to Specialist in Blood Bank Technology students; SBB 701 and SBB 702.

Introduces fundamental and advanced serologic testing techniques, including antibody identification, crossmatching, and molecular typing in immunohematology. Emphasizes quality assurance practices. Lecture, 2 units; Activity, 1 unit. (Plus-minus letter grade only)

SBB 704 Transfusion Practice and Patient Blood Management (Units: 3)
Prerequisites: Restricted to Specialist in Blood Bank Technology students; SBB 701 and SBB 702.

Examine core concepts of transfusion medicine, including indications and contraindications for blood products, recognition and management of transfusion reactions, massive transfusion protocols, and evidence-based strategies for patient blood management across diverse clinical settings. Lecture, 2 units; Activity, 1 unit. (Plus-minus letter grade only)

SBB 705 Laboratory Operations, Leadership, and Quality Management (Units: 2)
Prerequisites: Restricted to Specialist in Blood Bank Technology students; SBB 703 and SBB 704.

Explore key concepts in clinical laboratory operations, including quality assessment and regulatory practices, laboratory safety, analytical problem-solving, instrumentation principles, and foundational approaches to laboratory administration and management. Lecture, 1 unit; Laboratory, 1 unit. (Plus-minus letter grade only)

SBB 706 Specialist in Blood Bank Technology Capstone (Units: 2)
Prerequisites: Restricted to Specialist in Blood Bank Technology students; SBB 705 (may be taken concurrently).

Develop and present an independent research project or leadership-focused initiative in transfusion medicine. Coursework incorporates structured preparation for SBB (ASCP) certification through review sessions, case-based discussions, problem-solving activities, and mock certification examinations. Lecture, 1 unit; Activity, 1 unit. (Plus-minus letter grade only)

SBB 707 Immunohematology Field Practicum (Units: 2)
Prerequisites: Restricted to Specialist in Blood Bank Technology students; SBB 705 (may be taken concurrently).

Supervised clinical practicum experience in transfusion medicine, verifying SBB (ASCP) competency requirements through rotations in approved transfusion services, blood centers, and specialty laboratories such as HLA, apheresis, and molecular testing. Document clinical activities and submit case studies demonstrating applied skills and professional practice. (Plus-minus letter grade only)