

Curriculum for Associate Degree in Surgical Technology

The curriculum for associate degree in Surgical Technology consists of (72 credit hours) as follows:

Serial No	Requirements	Credit Hours
First	University Requirements	12
Second	Program Requirements	18
Third	Specialization Requirements	42
Total		72

The curriculum for associate degree in Surgical Technology

First: University requirements (12 credit hours) as follows:

Course No.	Course Title	Credit Hours	Weekly Contact Hours		Prerequisite
			Theoretical	Practical	
22001101	Arabic Language	3	3	-	
22002101	English Language	3	3	-	
21901100	Islamic Culture	3	3	-	
21702101	Computer Skills	3	1	4	
Total		12	10	4	

Second: Program requirements (18 credit hours) as follow:

Course No.	Course Title	Credit Hours	Weekly Contact Hours		Prerequisite
			Theoretical	Practical	
21301123	Medical Physics	3	3	-	
21301131	Biochemistry	2	2	-	
21301132	Biochemistry lab	1	-	3	21301131*
21102111	Anatomy	3	3	-	
21102113	Physiology	3	3	-	21102111*
21102115	Medical sociology	3	3	-	
21102117	Medical terminology	3	3	-	
Total		18	17	3	

* Co-requisite

Third: Specialization Requirements (42 credit hours) as follows:

Course No.	Course Title	Credit Hours	Weekly Contact Hours		Prerequisite
			Theoretical	Practical	
21102141	Fundamentals of nursing	3	3	-	
21102142	Fundamentals of Nursing / Clinical	2	-	6	21102141*
21104131	Pathophysiology	3	3	-	21102113*
21102131	Pharmacology	3	3	-	
21125101	Surgical Technology (1)	3	1	6	
21125201	Surgical Technology (2)	3	1	6	21125101
21125211	General Surgery	3	1	6	21125201*
21125221	Orthopedic Surgery	2	1	3	
21125231	Genitourinary Surgery	2	1	3	
21125241	Neurological Surgery	2	1	3	
21125251	Plastic Surgery	2	1	3	21125211*
21125261	Gynecologic and Obstetric Surgery	3	2	3	
21125271	Pediatric Surgery	3	2	3	
21125281	Ear, Nose and Throat (ENT) Surgery and Eye	2	1	3	
21125291	Vascular, Thoracic, and Cardiac Surgery	3	1	6	
21125200	Training**	3	-	-	
Total		42	22	51	

* Co-requisite

** Equivalent to 280 training hours

Guiding Plan

First Year					
First Semester			Second semester		
Course No.	Course Title	Credit Course	Course No.	Course Title	Credit Course
22001101	Arabic Language 101	3	21301123	Medical Physics	3
22002101	English Language 101	3	20602113	Physiology	3
21702101	Computer Skills	3	21901100	Islamic Culture	3
20602117	Medical Terminology	3	21301131	Biochemistry	2
20602111	Anatomy	3	21301132	Biochemistry/ Lab	1
21104215	Medical Sociology	3	21104131	Pathophysiology	3
			21125101	Surgical Technology (1)	3
Total		18	Total		18

Second Year					
Third Semester			Fourth semester		
Course No.	Course Title	Credit Course	Course No.	Course Title	Credit Course
21102141	Fundamental of nursing	3	21125271	Pediatric Surgery	3
21102142	Fundamental of nursing (Practice)	2	21125241	Neurological surgery	2
21102131	Pharmacology	3	21125251	Plastic surgery	2
21125201	Surgical Technology 2	3	21125261	Gynecologic and Obstetric Surgery	3
21125211	General Surgery	3	21125281	Ear, Nose and Throat (ENT) and Eye Surgery	2
21125231	Genitourinary Surgery	2	21125291	Vascular, Thoracic, and Cardiac Surgery	3
21125221	Orthopedic Surgery	2	21125200	Training	3
Total		18	Total		18

Brief Description for Courses of the Study Plan of Surgical Technology

Course Title	Course No	Credit Hours (Theoretical /Practical)
Arabic language	22001101	3(3.0)
<p>تتضمن هذه المادة مجموعة من المهارات اللغوية بمستوياتها وأنظمتها المختلفة: الصوتية، والصرفية، والنحوية، والبلاغية، والمعجمية، والتعبيرية، وتشتمل نماذج من النصوص المشرقة: قرآنية، وشعرية، وقصصية، من بينها نماذج من الأدب الأردني؛ يتوخى من قراءتها وتدوقها وتحليلها تحليلًا أدبيًا؛ تنمية الذوق الجمالي لدى الطلاب الدارسين.</p>		
English language	22002101	3(3.0)
<p>English 1 is a general course. It covers the syllabuses of listening, speaking, reading, writing, pronunciation and grammar, which are provided in a communicative context. The course is designed for foreign learners of the English language, who have had more than one year of English language study. The extension part would be dealt with in the class situation following the individual differences.</p>		
Islamic culture	21901100	3(3.0)
<ol style="list-style-type: none"> 1. تعريف الثقافة الإسلامية وبيان معانيها وموضوعاتها والنظم المتعلقة بها – وظائفها وأهدافها 2. مصادر ومقومات الثقافة الإسلامية والأركان والأسس التي تقوم عليها . 3. خصائص الثقافة الإسلامية . 4. الإسلام والعلم ، والعلاقة بين العلم والإيمان 5. التحديات التي تواجه الثقافة الإسلامية . 6. رد الشبهات التي تثار حول الإسلام . 7. الأخلاق الإسلامية والآداب الشرعية في إطار الثقافة الإسلامية 8. النظم الإسلامية . 		
Computer skills	21702101	3(1,4)
<p>An introduction to computing and the broad field of information technology is given. Topics covered include the basic structure of digital computer system, microcomputer, operating systems, application software, data communication and networks, and the internet. Hands-on learning emphasizes Windows xp, MS-office2000, and the internet.</p>		
Medical Physics	21301123	3(3,0)
<p>This course is designed to acquaint the students with knowledge about forces ad units of forces, energy changes in the body, heat loss from the body, and breathing mechanism. It helps the students acquire knowledge about electric signals of the body, general properties of sound in the body as a drum (percussion in medicine) and vision defects and corrections. Moreover, it makes the students recognize sources of radioactivity, nuclear medicine imaging devices, and the dose</p>		

in nuclear medicine and therapy with radioactivity.

Biochemistry (Theory)	21301131	2(2,0)
Biochemistry course introduces the basic essential information to the college students to know the biomaterials, which we deal with during over daily activities, classification, chemical structure, reactions and how the human body metabolizes such biomolecules work.		
Biochemistry (lab)	21301132	1(0,2)
This course deals with performing practical applications for the different classes of biomolecules including carbohydrates, lipids and proteins.		
Anatomy	21102111	3(3,0)
The course deals with structural anatomy of the body as a whole to provide the students with knowledge of the structure of the body of the human being. This course deals all the systems of the body in an attempt to make it easy for the paramedical students to recognize the organs of the body.		
Physiology	21102113	3(3,0)
This course is designed to provide the students with the knowledge of the functions performed by the various parts and organs of the human body. It also deals with the integrity of the body systems as a whole to let the student recognize the physiological changes that happen within the human body and how the body systems work.		
Medical sociology	21102115	3(3,0)
يتناول هذا المساق المضمون المعرفي لعلم الاجتماع من حيث الفكر الاجتماعي والرعاية الصحية. فيقدم عرضاً لمفاهيم: الصحة، المرض، الرعاية الصحية، الخدمة الصحية والسلوك المرضي. وكذلك يتناول الدور الذي يمارسه المجتمع في الخدمة الصحية والسياق الاجتماعي للصحة والمرض وانعكاسات مفهوم الصحة والمرض على الخدمات الصحية. ثم يتناول المساق أهم الميادين الدراسية في العلوم الاجتماعية والسلوكية وذلك لفهم السلوك الاجتماعي على المستوى النظري والعملية من التطرق إلى مفاهيم: المعايير، الاتجاهات و القيم.		
Medical Terminology	21102117	3(3,0)
This course is designed to develop a working knowledge of the medical language to let students and abbreviations. By prefixes acquire word building skills by learning word roots , suffixes, relating terms to body systems, students should identify the proper use of words in a medical environment. Knowledge of medical terminology enhances the students' ability to communicate and practice his/her work successfully on the purpose of providing health services.		
Fundamentals of nursing	21102141	3 (3-0)
This course serves as a base for the other nursing courses it is designed to provide the student with the basic nursing concepts and principles needed for the practice of nursing. The course emphasizes the student's understanding of the nature of the client needs and the intervention required utilizing the functional health patterns.		
Fundamentals of nursing/ clinical	21102142	2 (0-6)
This course is designed to provide the student with laboratory guided experiences related to the integrated understanding of the basic nursing concepts and its practical applications to enable nursing students in performing nursing activities safely. Critical thinking and problem based learning will be emphasized.		

Pathophysiology	21104131	3 (3-0)
<p>This course focuses on the physiologic changes that occur due to internal and external environmental stressors, pathological processes and the responses that produce signs and symptoms. Underlying concepts and principles common to health deviations in all major physiological systems are presented.</p> <p>The content is based on common health problems, including the special health needs of children and the elderly. The student will explore a variety of concepts of path physiology, which will be utilized in clinical decision making and action related to nursing courses.</p>		
Pharmacology	21102131	3 (3-0)
<p>This course is designed to provide nursing students with general information and description of important drugs which are related to a particular system of human body or to an aspect of medical care. Emphasis on selected drugs that used in operation room including anesthesia drugs.</p>		
urgery lareneG	21125211	3 (1-6)
<p>This course is designed to provide nurses with historical back ground, special considerations about general surgery, breast surgery, abdominal surgeries, liver, biliary and spleen operations, pancreatic, colo-rectal, anal and hernias. This course enable nurses in applying nursing activities safely for patient with general surgical problems. Critical thinking and problem based learning will be emphasized.</p> <p>Knowledge of anatomy and physiology of G.I system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs</p>		
Surgical Technology 1	21125101	3 (1-6)
<p>This course is designed to introduce the student to the role, working environment and required skills of the surgical technologists. Principles of aseptic technique, standard precautions, and methods of infection control will be emphasized. The student participates with supervision, in the perioperative care of the surgical patient, utilizing beginning skills of aseptic technique, instrumentation, and environmental control.</p>		
Surgical Technology 2		3 (1-6)
<p>This course focuses on study of sterile technique and basic techniques necessary to function as a surgical technologist in the scrub role and circulatory (runner) role. Topics include principles of sterile technique, surgical scrub, gowning and gloving self and others, case setup, medication handling, counts, draping and proper instrument handling.</p> <p>Content common to surgical procedures is presented in this course, which builds on surgical technology procedures and focuses on such topics as occupational safety, methods of homeostasis, care and handling of specimens, incisions, wound closure, drains, dressing, needles, suture materials, endoscopic surgery, anesthesia, and complications of surgery. Selected surgical procedures are included as prototypes to explain content. Safe handling of instruments, and</p>		

additional instruments and supplies are included

Orthopedic Surgery	21125221	2 (1-3)
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This course is designed to provide nurses with historical back ground, special features of orthopedic surgery, fractures, joints procedures, vertebral operation and cast application. This course enable nurses in applying nursing activities safely for patient with orthopedic problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of musculoskeletal system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Genitourinary Surgery	21125231	2 (1-3)
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This course is designed to provide nurses with historical back ground, special features of urological surgeries, male and female reproductive organs operation and endocrine glands. This course enable nurses in applying nursing activities safely for patient with urological problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of urological system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Neurological Surgery	21125241	2 (1-3)
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This course is designed to provide nurses with historical back ground, special consideration of neurosurgery, surgical procedures of cranium, spine and peripheral nerves. This course enable nurses in applying nursing activities safely for patient with neurosurgery problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of nervous system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Plastic Surgery	21125251	2 (1-3)
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This course is designed to provide nurses with historical back ground, special features of plastic and reconstructive surgeries, skin and tissue grafting, head and neck plastic and reconstructive surgeries and other body areas. This course enable nurses in applying nursing activities safely for patient with plastic and reconstructive problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of skin and soft tissues will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Gynecologic and Obstetric Surgery	21125261	3 (2-3)
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This course is designed to provide nurses with historical back ground, special considerations of gynecological surgeries, diagnostic techniques, vulvar and vaginal procedures, This course enable nurses in applying nursing activities safely for patient with gynecological and obstetric problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of female reproductive system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Pediatric Surgery	21125271	3 (2- 3)
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This course is designed to provide nurses with historical back ground, special features of pediatric surgeries. This course enable nurses in applying nursing activities safely for patient with pediatric problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of different systems will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Ear, Nose, and Throat ENT Surgery and Eye surgery	21125281	2 (1-3)
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This course is designed to provide nurses with historical back ground, special considerations of nose, ear, throat, oral cavity problems, face and neck, ocular operations, eye injuries, ophthalmic laser This course enable nurses in applying nursing activities safely for patient with ENT and eye problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of nose, ear, throat, and eye system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Vascular, Thoracic, and Cardiac Surgery	21125291	3 (1-6)
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This course is designed to provide nurses with historical back ground, special features of thorax, cardiac and vascular surgeries, chest trauma, intrathorax esophageal procedures, common cardiac surgical procedures, and conservative interventional procedures. This course enable nurses in applying nursing activities safely for patient with cardiac, vascular and thorax problems. Critical thinking and problem based learning will be emphasized.

Knowledge of anatomy and physiology of thorax, heart and great vessels, vascular system will be re-enforced from the surgical technology perspective. The elements of general surgery as they pertain to the surgical technologist are presented. Integration and re-enforcement of medical terminology, pathology, specific anatomical structures, surgical instruments, supplies, and drugs.

Training	21125200	3 (280 training hours)
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This clinical rotation in a hospital provides the first opportunity for the student to apply knowledge gained as a "scrub" or circulatory role on surgical operations and work with specialized supplies and equipment. Knowledge and skills will apply with emphasis on role of surgical technologist. The student will take full responsibility under the supervision of clinical instructors and staff incharge of clinical settings who act as preceptors. Students will be participating in setting up, carrying out and breaking down a surgical case and will experience the environment of the work and team members. Planned clinical conference will provide time for exposure to biotechnology and specialized instruments and discussion of the experience.