KINGSBOROUGH COMMUNITY COLLEGE OF THE CITY UNIVERSITY OF NEW YORK

Course Name:	Fundamentals of Surgical Technology - ST 100
Course Credits:	3 hour credits.
Class Time:	Mondays: 11:30 am to 12:30 pm
	Wednesday: 11:30 am to 1:40 pm
Instructor:	Tyronne Johnson, BA CRCST CST
Office:	M435
Email:	Tyronne.Johnson@kbcc.cuny.edu
Phone:	718-368-6918
Office Hours:	Monday: 1:00 pm to 2:00 pm
	Wednesday: 2:00 pm to 3:00 pm

Course Syllabus 2018

Course Description:

Students are introduced to the role and responsibilities of the surgical technologist, the healthcare team, and the clinical environment. Topics include historical perspectives of perioperative services, medical terminology, environment and workplace safety, patient care and safety, age-extreme patients, cultural competencies, and patients with special needs. Students learn the basic of biomechanics and computers, as well as professional conduct and legal accountability.

Course Overview:

This introductory course intends to introduce the student to the broad field of health care and the specifics of the Surgical Environment.

Course Objectives:

Student Learning Outcomes	Assessment Measures
1. Describe the professional role of the Surgical	Students will satisfactorily answer questions on the examinations regarding the
Technologist, the educational preparation and the certification process	academic and practice preparation for certified surgical technologists.
2. Identify the spectrum of medical terminology used in the surgical environment.	Students will complete practice exercises extensively during this course and answer examination questions correctly with regard to medical terminology prefixes, suffixes and root words. This will build a base for continued growth in medical terminology throughout the program.
3. Describe the methods of sterilization and discuss the advantages and disadvantages of each.	The students will demonstrate knowledge of the various sterilization methods by successfully answering test questions on the topic as well as submission of a related writing assignment. Principles of microbiology will be reinforced as the students identify the proper sterilization methods of various types of supplies and equipment.
4. Describe a typical organization structure of	The students will answer examination questions that will reflect an understanding
Perioperative Services, as it exists in a variety of	of the structure of the health care system, accrediting. /regulating bodies and
health care settings.	hospital organizations.
5. Describe the Operating Room environment including the composition and function of all members of the surgical team.	The students will correctly answer examination questions regarding the role and function of all staff members in the operating room environment.
6. Identify the relationship between hospital departments as they impact on Perioperative Services.	The students will be given the opportunity to recall and review the relationships of various hospital departments as they impact on the care of the surgical patient. Examination questions will give them the opportunity to identify them.
7. Discuss the application of technological sciences to surgical technology.	The students will demonstrate a working knowledge of computer, electricity, laser and robotic technology as they relate to the surgical patient. They will answer test questions successfully and submit writing assignments that demonstrate this knowledge.
8. Describe methods of communication.	Students will demonstrate in the classroom, on examinations and writing assignments, various types of communication methods that are both appropriate and inappropriate for the professional health care arena.
9. Discuss surgery from the patient's perspective and the ethical considerations that are pertinent to the Perioperative environment.	Students will demonstrate an understanding and sensitivity to patients of all ages, cultures and religions during classroom discussions and examinations.

Topical Outline:

Unit I	Introduction to the Course and the Health Care System
Unit II	The Historical Development of Surgery
Unit III	The Development of the Surgical Technologist and Current Practice
Unit IV	The Surgical Environment: Personnel and Physical
Unit V	Professionalism and Communication
Unit VI	Technological Sciences
Unit VII	Surgical Conscience and Ethical Considerations
Unit XIII	Patient's Perspective of Surgery

Required Readings:

- Fuller, Joanna K., Surgical Technology: Principles and Practice, 6th Edition, Elsevier,

- Rutherford, Colleen, Differentiating Surgical Equipment and Supplies, 2010

Grading Scheme:

Grades will be calculated according to college and departmental policy as follows:

A+ 98-100 A 95-97 A- 90-94	B+ 88-89 B 85-87 B- 80-84	C+ 78-79 C 75-77 C- 70-74	D+ 68-69 D 65-67 D- 60-64	 F 59 and below W Withdrew without penalty WU Unofficial Withdrawal (Counts as failure)
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* INC Term's Work Incomplete. Counts as "F" grade unless work is completed within six months.

* The minimum passing grade required for a surgical technologist course (SUR) is a C+ (75%); any grade below a C+ (75%) is a failing grade. Refer to the Surgical Technologist Student Handbook for academic progression and grading criteria.

Assessment Criteria:

Assessment Type	#	Description	% of Grade
Final Exam	1	Final Exam	30%
Quizzes	10	Medical Terminology: Suffixes, Prefixes, Body regions and plains, root terms.	20%
Exams	4	End of Unit Tests	40%
Assignments	10	All assignments must be handed in by the end of the course to complete the requirements of the course. A late assignment will meet the requirements of the course, but will not receive full credit. A penalty of five (5) points will be assessed to each day that the assignment is	5%
Presentation	1	handed in late	5%

Course Policies:

Behavioral Standards: All wireless devices (phones, tablets, electronic games) or other devices that generate sound must be turned off during class. Students should refer directly to the Surgical Technologist Student Handbook as well as the Lab/Clinical Surgical Technologist Handbook or KBCC catalog for behavioral standard policies.

Makeup Policy: Students are expected to take all tests when scheduled. For unforeseen circumstances exceptions will made and faculty must know in advance.

Students who do not take a test on the scheduled date are required to take a makeup test. All makeup tests will be given at the end of the semester. Students who fail to take the scheduled exams or makeup will receive a grade of zero for that test.

Attendance: Since attendance and punctuality are a key element as a Certified Surgical Technologist in an Operating Room, neither is acceptable without proper documentation as to the reason for either the absence or the lateness. A student is deemed excessively absent when he or she has been absent 15% of the number of contact hours a class meets during a semester. When a student is excessively absent, a grade of "W" or "WU" will be assigned as described in the college catalog

COURSE CALENDAR 2017

DATES ARE SUBJECT TO CHANGE

UNIT 1:					
Learning Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates		
 Upon completion of the unit the student will be able to: 1. Identify course requirements 2. Identify the different types of health care facilities and state how they differ from each other. 3. Describe a typical hospital organizational structure. 4. Explain various methods of reimbursement for health care costs 	Introduction to the Course - Course Orientation - Course Overview - Program Philosophy and Outcomes - Course Requirements and Syllabus Health Care Systems 1. Types of hospitals 2. Funding sources. 3. Hospital organization - Board of trustees - Administration - Departments - Physician Staff 4. Health Insurance - Medicare - Medicare - Medicaid - Private 5. Health maintenance organizations (HMO)	MONDAY 03/06 INTRODUCTION - Syllabus Overview - Student Handbook review. Discussion from Handouts, Lecture and PPT - Introduction to the course - Health Care System	Home Reading Assignment for next class: Fuller Textbook: -Health Care Systems Ch.1 pp. 2-11. Ch. 4 pp. 64, 65 -Sterilization Ch. 11 pg. 198-225 Various Handouts: - Health Care Systems & - The New York State Surgical and Invasive Procedure Protocol		
5. Describe the regulatory agencies and how they impact on health care facilities and their practice.	 NYS Department of Health "The New York State Surgical and Invasive Procedure Protocol" Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) National Board of Surgical Technologists and Surgical Assistants (NBSTSA) 	WEDNESDAY 03/08 Continuation of Discussion from Lecture & PPT: - Health Care System & - Regulatory and Accrediting Agencies	Home Reading Assignment for next class: Sterilization Assignment Assignment 1 Due		
Upon completion of the unit the student will be able to: 6. Explain main components of medical terms	Terminology: - Prefixes - Suffixes	Overview of Terms from Handouts & PPT: - Prefixes, suffixes, word roots, planes, body cavities, regions and quadrants	Study for Quiz 1 Med term Prefixes		
7. Describe the Principles and Methods of Decontamination, Sterilization and Disinfection	Sterilization	Discussion from Lecture and PPT Decontamination, Sterilization and Disinfection	Home Reading Assignment for Unit 2 Ch. 1 pp. 2-11 Ch. 4 pp. 64, 65		

UNIT 2:	THE HISTORICAL DEVELOP	MENT OF SURGERY	
Learning Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates
Upon completion of the unit the student will be able to 1. Identify concepts and events that contributed to the development of surgery.	Historical development of the surgical specialty - Pre-history of surgery - Classical period - Dark ages - Middle ages - Renaissance - Development of science 2. Adjuncts related to control of: - pain – hemorrhage - infection - and asepsis.	MONDAY 3/13 Discussion from Lecture & Handouts & PPT: - History of Surgery - Handouts: Surgical Timeline and The Evolution of Surgery	Terminology Quiz 1: - Prefixes
 Describe surgery as it is today. Define the role of the Surgical Technologist in today's Health Care System. 	Surgery Today: 1. Categories 2. Specialties 3. Related Areas - Emergency Room - Labor and Delivery - Endoscopy - Ambulatory Facilities The Field of Surgical Technology 1. Surgical team and Roles 2. Requirements 3. Nature of the position 4. Duties 5. Accountability	WEDNESDAY 03/15 Discussion from Lecture & PPT: - Surgery Today Class Role Play Assignment Discussion and role participation how each team member effects the performance of the Surgical technologist Role of Surgeon Anesthesiologist Surgeon Anesthesiologist Surgical Assistant Circulator Scrub Technologist	Assignment 2 Due Read Case Study Black Board Assignment 250 words or less w/ one textbook reference Post a response on two of your colleague's entries Due 3/20 Home Reading Assignment for Unit 3 Handout: - The ST History Timeline Textbook: Fuller - Chapter 1 pp. 3-11
2. Explain main components of medical terms	Terminology: - Planes - Body Cavities - Regions and quadrants	 <u>Handout & PPT</u> Prefixes, Suffixes, Word Roots, Planes, Body Cavities, Regions and Quadrants 	Study for Quiz #2 Monday 03/20 Medical Terms (Suffixes)

UNIT 3	THE DEVELOPMENT OF THE SU	JRGICAL TECHNOLOGIST AN	D CURRENT PRACTICE
Learning Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates
Unit 1 & 2 Review	10 min Informal Writing Review Questions & Group Case Studies Medical Term Review Planes & Body Cavities	MONDAY 3/20 Case Studies Chap 1, 4, & 11 Discussion	Medical Term Quiz #2 Suffixes Home Reading Assignment for Unit 3 Handout: - The ST History Timeline Textbook: Fuller - Chapter 1 pp. 3-11
Upon completion of the unit the student will be able to: 1. Describe the Professional Organization of the Association of Surgical Technologists (AST)	History of the Surgical Technology 1. Membership in AST - goals and purpose 2. Certification - purpose and preparation 3. Continuing education - methods and documentation 4. Role Model 5. Publications Standards of Practice – Association of Surgical Technologists (AST) Recommendations for Entry into Practice (AST)	WEDNESDAY 3/22 Discussion from Lecture & PPT: - Handout: The Surgical Technology History Timeline. - Sample Job Description & Scope of Practice. - PPT: History of Surgical Tech.	Assignment 3 Due EXAM 1: Units 1 & 2
1. Discuss future trends in legislation regarding unlicensed personnel in the OR.	Standards of Practice : – Association of peri-Operative Nurses (AORN)	Discussion from Lecture & PPT: - The Surgical Technology History Timeline.	Home Reading Assignment for Unit 4: Handouts: - Health Care Systems Textbook: <i>Fuller</i> - Healthcare Facility Chapter 4 pp. 52-65

UNIT 4	THE SURGICAL ENVIRONMENT: PERSONNEL AND PHYSICAL			
Learning Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates	

Upon completion of the unit the student will be able to: 1. Define the members of the surgical team and state the role of each. 2. Describe the physical layout of the surgical suite.	Health Care Facility -Standards and recommendations -Accreditation -Location in the hospital -Floor plan -3.Traffic patterns -Environmental Controls -5. Communication methods Perioperative Professions 1. Anesthesia Care Provider 2. Surgeon 3. First and Second Assistants 4. Scrub Personnel 5. Circulating Personnel 6. Ancillary Personnel	MONDAY 03/27 Week 4 Discussion from Lecture & PPT: - Sample Job Summaries - Health care facility - Surgical team roles Health care systems	Terminology Quiz 3: - Planes - Body Cavities
3. Describe the environmental requirements of the surgical suite.	Environmental Systems 1. Systems and outlets - surgical gases 2. Temperature and humidity 3. Ventilation systems 4. Surgical Attire	WEDNESDAY 03/29 Discussion from Lecture & PPT: - Environmental Systems - AORN Standards and Recommended Practices and Guidelines:	Assignment 4 Due <u>Home Reading</u> <u>Assignment</u> <u>for next class:</u> Handout & Textbook: Chapter 8 pg. 121-138 Chapter 18
4. Explain main components of medical term	Terminology: Regions and Quadrants Surgical incision	Hand out & PPT Planes, Body Cavities, Surgical Incisions	Study Quiz 4 Planes
5. Describe environmental safety measures within the surgical suite.	 Environmental Hazards Electricity and electrical hazards Fire safety Radiation safety Lasers and precautions AORN Standards, Recommended Practices and Guidelines for safety in the Operating Room Electrosurgery Hazards in the Surgical Environment Laser Safety in Practice Settings Reducing Radiological Exposure Fire Prevention Sharps Injury Prevention 	MONDAY 04/03 Discussion from Lecture PPT: - Environmental hazards <u>Films</u> : "Fire safety in the OR" "Radiation safety in the OR"	Terminology Quiz 4:Regions and QuadrantAssignment 5 DueReading Assignment for Unit 5:Handouts & PPT: - Environmental hazards - Textbook: Fuller Chapter 17 (physics) Chapter 18 (energy sources) Chapter 19 pp. 336-344 (computer) Chapter 22 pp. 558-565 (robotics)
6. Describe environmental safety measures within the surgical suite	Environmental Hazards 5. Chemical Safety Measures - Material Safety Data Sheets 6. Smoke Exposure 7. Latex exposure 8. Waste gas	Discussion from Lecture PPT: - Environmental hazards	

UNIT 5:	TECHNOLO	GICAL SCIENCE	S		
Learner Objectives	Content/Lec	ture Discussion	Related Learn	er Experiences	Assignments and Evaluation Due Dates
			WEDNESDAY 04/5		EXAM 2: Units 3 & 4
Upon completion of the unit the student will be able to: 1. Discuss the use of computers in the surgical	Essential Computer Technology 1. Components of computers 2. Desktop 3. Software 4. Word Processing		Discussion from Lecture PPT: - Essential Computer Concepts		Reading Assignment for Unit 5: Textbook: Fuller
environment.	 Word Procest Printing Internet basi Applications 	ssing and Surgical Consent		Chapter 17 (physics) Chapter 18 (energy sources) Chapter 19 pp. 336-344	
2. Discuss the surgical patient consent form	Usage of Computer Technology Surgical Consent form - Informed consent - Responsibilities of surgical team - Procedure of consent form - Purpose and Types of consents				(computer) Chapter 22 pp. 558-565 (robotics)
Root words		es & Pertaining			
Mon. 4/10 – Tu SPRING BR		ENJ	OY	assignments) catch up on any , reading and studying Term Quiz on 4/19
3. Discuss concepts of electricity.	Electricity for		WEDNESDAY 04/19		Assignment 6 Due
4. Discuss physics for the surgical technologist.	 Atoms and electrons Insulators Charge and currents Volts, Ohms Resistance Direct and Alternating Current 				Terminology Quiz 5 Word Roots Physical Forces & Pertaining to Drugs
		assignments entations	Films: - Principles of ele Electrosurgery a		
5. Discuss the science of surgical robotics	Physics for the	e ST	MOND	AY 4/24	<u>Reading Assignment</u> for Unit 6
6. Discuss physics for the surgical technologist.	 2. Speed 3. Velocity 4. Momentum 5. Harmonic m 	1. Motion 2. Speed 3. Velocity		on from Lecture	Textbook: Fuller Chapter 2 Chapter 3
6	6. Energy and		- Fundamental o	f Physics and	1 -

	7. Matter	Energy Sources	
	8. Heat		
	9. Waves	- Robotics	
	10. Light		
	11. Applications in the OR		
	Robotics		
	Robotic design and components		
Root words		Hand out	Medical Terminology:
			Word parts

UNIT 6	PROFESSIONALISM AND COMMUNICATION & TEAM WORK		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates
Upon completion of the unit the student will be able to: 1. Locate and evaluate information from multiple sources.	Patient Info Management - Importance of patient's records - Legal guidelines - Standard chart information - Correcting and updating medical records	WEDNESDAY 4/26 Discussion from Lecture PPT: - Patient Information Management - Communication & Work	Assignment 7 Due Reading for next class: (after break) Textbook: Fuller Chapter 2 Chapter 3
1. Identify and define methods of communication.	Means of communication - verbal - non verbal - written - electronic Purpose of communication - accurate records - Continuity of patient care - legal aspects - identifying needs - information management - computer skills Group dynamics Team work Stress related to communication 1. Stress vs. distress 2. Sources of stress 3. Reactions to stress	MONDAY 05/01 Discussion from Lecture PPT: - Fundamentals of Communication and Teamwork, Stress.	Terminology Quiz 6 Root Words

1. Discuss the multiple	Conflict in the OR - Concepts and Strategies	WEDNESDAY 5/03 Discussion from	<u>Reading Assignment</u> for Unit 7
components of critical		Lecture PPT:	
thinking and its application	Critical thinking in Surgical	- Fundamental of Critical	Textbook: Fuller
in the operating room	Technology	Thinking	Chapter 3 pp. 30-49
	- Components	- Emotional intelligence- Self	
	- Process of thinking in	Management for the OR	
2. Define emotional	healthcare		
intelligence and its	- Assessment	Films:	
relationship to conflict	- Self-monitoring	"Conflict Resolution"	
resolution		"Conflict Management"	
	Emotional Intelligence	"Methods of Conflict Resolutions"	
3. Identify types of stress,	- Relationship to conflict	- Preventing errors in the OR"	
causes and methods of	resolution and stress	- Emotional Intelligence- Self	
coping.	management.	Management	
		http://www.youtube.com/watch?v=u3k7lykTWTk http://www.youtube.com/watch?v=dmz9Yb9dWck	

UNIT 7	SURGICAL CONSCIENCE AND ETHICAL CONSIDERATIONS		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Assignments and Evaluation Due Dates
		MONDAY 05/08	EXAM 3: Units 5 & 6
		WEDNESDAY 05/10	
Upon completion of the unit the student will be able to: 1. Identify the various legal issues and professional standards of conduct.	 Law and the surgical technologist Legal terminology accountability liability liability negligence malpractice torts iatrogenic injury Establishing negligence Professional standards and practices federal and state laws legal precedent hospital policy professional guidelines 	Discussion from Lecture PPT - Law, Documentation and Professional Ethics	Terminology Quiz 7 Root Words
1. Discuss specific Operating Room incidents that could result in litigation.	Common areas of Negligence 1. Patient misidentification 2. Incorrect procedure/side 3. Incorrect counts 4. Burns 5. Falls/injuries 6. Abandonment 7. Incorrect positioning 8. Incorrect identification of specimen. 10. Lack of informed consent	Discussion from Lecture & PPT Law, Documentation and Professional Ethics	Reading Assignment for Next Week: Textbook: Fuller: Chapter 3

1. Define surgical conscience and identify its application in relation to the surgical patient.	 Breach of confidentiality Assault and battery Documentation Guidelines for documentation Common types of documents Risk management Insident on continued expert 	<u>MONDAY 05/15</u>	Assignment 8/9 Due
2. Identify the basis for ethical and moral decision- making.	 Incident or sentinel report Advance health care directives Ethics Ethical behavior in health care Ethical and legal concerns Ethical dilemmas Professional code of ethics Patient's rights 	Discussion from Lecture & PPT - Surgery on the Wrong Patient or wrong site surgery. - Safety Concerns and OSHA - AST handling and care of surgical specimens Documentation and Professional Ethics Films: Wrong Site Surgery http://www.youtube.com/watch?v=ORHBJiac8wU	Terminology Quiz 8: -Word Roots <u>Reading Assignment</u> <u>for unit 8:</u> Textbook: Fuller Ch. 6- The Patient

UNIT 8	PATIENT'S PERSPECTIVE OF SURGERY		
Learner Objectives	Content/Lecture Discussion	Related Learner Experiences	Writing Assignments and Evaluation Due Dates
		WEDNESDAY 05/17	Assignment 10
Upon completion of the unit the student will be able to:	Maslow's Fundamental Human Needs 1. Individual	Discussion from Lecture & PPT	Due
1. Discuss the uniqueness of each patient as an individual and how factors influence the perception of surgery.	 self image relationships sources of security Hospitalization Religious/cultural influences Age related considerations 	- The Patient	Terminology Quiz 9/10: -Word Roots
1. Discuss the physical and spiritual needs of the surgical patients. Physics for the	1. Physical needs - nutrition - water	D'annai an faran	
surgical technologist.2. Discuss the sources of fear	 oxygen/carbon dioxide sleep 	Discussion from Lecture & PPT	
and anxiety in the surgical patient and appropriate response by the health care team.	 regulation of body processes elimination of waste 2. Spiritual needs support of patient's beliefs recognize the use of religion to reduce anxiety respecting expressions of religion Sources of fear/anxiety Responses nonverbal communication reporting needs 	- The Patient	
		<u>MONDAY 5/22</u>	EXAM 4: Units 7 & 8

Practice for Presentations Wed. 5/24 College closed Monday, May 29 Presentations: 5/31- 6/5 Review for Final on Wed. 6/7 Final 6/12- 6/14