



كلية فقيه للعلوم الطبية
Fakeeh College for Medical Sciences

COURSE HANDBOOK

Program: Post-Graduate Online Courses
Course Name: Advance Critical Care Nursing Course
Course Code & Number: SNBC 101

Sep-Nov 2021

Welcome Message from Your Teaching Staff



WELCOME to Advance Critical Care Nursing Course (SNBC 101)

We hope you embark with us on an enriching and enjoyable learning experience. We are committed to providing you with high quality education in an active learning environment.

This handbook provides you with an overview of this course. It includes all the information relevant to the educational process, including but not limited to teaching, learning, assessment, staff members and learning resources.

Your journey in this course will take 12 weeks. We look forward to a productive course with you.

REMEMBER



During your journey in this course, you have to remember the followings:





In addition to the teaching hours provided by the teaching staff, there is additional learning hours that you (as a participants) are expected to study independently (e.g. in assignments or other work associated with the course). For this course, these expected hours are (14 hrs. /week) over the course duration.



To get the best achievements in this course, it is highly recommended to demonstrate your commitment, hard work, regular class attendance and participation in all assigned activities and readings. In addition it is important to utilize all the learning resources provided by the college such as library, language and IT labs, and electronic facilities....etc.

Course Identification

College:	Fakeeh College for Medical Sciences	
Program:	Post-Graduate On-Line Courses	
Course Title:	Advance Critical Care Nursing Course	
Course Code:	SNBC 101	
Credit Hours	4 CHs (4 Contact Hours/Week)	
Target Audience	Health Care Workers	
Date & Time of Delivery	Sundays: 12-4 PM	
Course Instructors	Course Coordinator Dr. Mohannad Abu Ruz Email: meruz@fcms.edu.sa Contact No. 0126588650 Ext. 412 Academic Rank: Professor at FCMS Specialty: Critical Care Nursing Position: Faculty Staff	Co-Coordinator Dr. Jefferson G. Guerrero Email: jgguerrero@fcms.edu.sa Contact No. 0126588650 Ext. 411 Academic Rank: Assistant Professor at FCMS Specialty: Critical Care Nursing & Nursing Education Position: Faculty Staff
		

Course Description and Main Objective

1. Course Description

This course is designed to provide post graduate critical care nursing students with the skills, knowledge, competencies skills, values and attitudes required to care competently and safely for critically ill patients. It focuses on having the students expand their knowledge base and master critical care nursing psychomotor skills associated with assessment and provision of comprehensive nursing care for patient with acute life threatening conditions enable the post graduate students to provide comprehensive evidence based quality nursing care for critically ill patient with different body systems alterations, with different types of invasive and non-invasive devices and with different types of equipment encountered in critical care settings. The nursing process is used as an approach of providing holistic patient care. Furthermore, the Loveren Crescent of Care Model will be utilized to guide culturally sensitive care to ensure that the critically ill patient is managed within the Islamic values. Critical thinking, clinical judgment, decision making, and teamwork are emphasized in this course.

2. Course Main Objective

The purpose of this course is to provide post graduate nursing students with the necessary specialist / expert knowledge, competencies, critical care values and attitudes required to manage the critically ill patient with competence.

Course Learning Outcomes, Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	Describe the principles and concepts of critical care nursing work environment in accordance with a conceptual models of nursing theories.	Interactive lectures Small group discussion	Written Exam: MCQs Essays
1.2	Recognize the etiology, pathophysiology, clinical manifestations and management of different critical related diseases.	Interactive lectures Small group discussion	Written Exam: MCQs Essays
1.3	State the importance of utilizing evidence –based intervention in meeting psychosocial needs of the critically ill patients and their families.	Interactive lectures Small group discussion	Written Exam: MCQs Essays

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.4	Outline medications/ infusion mechanism of action, side effects, and administration in critical care units	Interactive lectures Small group discussion	Written Exam: MCQs Essays
2.0	Skills		
2.1	Interpret diagnostic procedures and laboratory results regarding critically ill patient.	Interactive lectures Small group discussion Case based learning Flipped Classroom assignments	Written Exam: MCQs Essays
2.2	Prepare comprehensive nursing care for the critically ill patients with the different acute and life-threatening conditions and their families.	Interactive lectures Small group discussion Case based learning Flipped Classroom assignments	Written Exam: MCQs Essays
2.3	Record essential data pertinent to patients and nursing intervention	Interactive lectures Small group discussion Case based learning Flipped Classroom assignments	Written Exam: MCQs Essays
2.4	Demonstrate skills in using technology in preparing and presenting assignments.	Assignment	Assignment rubrics
2.5	Evaluate critically ill patient care through using clinical judgment and decision-making skills.	Interactive lectures Small group discussion Case based learning Flipped Classroom assignments	Written Exam: MCQs Essays
2.6	Appraise nutritional alterations and their management in ICU.	Interactive lectures Small group discussion Case based learning Flipped Classroom assignments	Written Exam: MCQs Essays
3.0	Competence		
3.1	Show emotional support during health care teaching to critically ill patients and their families	Assignment Role play Small Group Discussion	Assignment Rubric
3.2	Illustrate effective communication with patients, families, and health care providers.	Assignment Role play Small Group Discussion	Assignment Rubric

Mode of Instruction (Teaching Strategies):

The teaching strategies of this course in the below table are planned and identified according to course learning outcome and chosen based on the type of skills to be developed that fit the course learning domains (knowledge, skills & values). For example: (1) interactive lecture and discussion are designed to impart knowledge and cognitive skills; (2) student prepared presentation and case-based learning are designed to develop communication and information technology; (3) topic presentation and case study are designed to develop interpersonal skills and responsibility.

These innovative teaching methods aim to increase participants engagement and active class participation and enhance teamwork and leadership skills. They also contribute to increase in retention of course content, increased motivation, and improved interpersonal skills. Furthermore, active teaching strategies foster students' learning and their autonomy.

No	Activity	Learning Hours
Contact Hours		
1	Lecture	24
2	Laboratory/Studio	-
3	Seminars	-
4	Others (Small Group Discussion, Team Based learning, flipped classes, assignment, case-based learning and presentation)	24
	Total	48
Other Learning Hours*		
1	Study	5
2	Assignments	8
3	Library	3
4	Projects/Research Essays/Thesis	8
5	Others (Specify)	-
	Total	24

Course Evaluation System:

Assessment methods (direct and indirect) that show in the below tables are designed to measure the different levels of course learning domains (Knowledge, Skills & Values). The direct method includes written examinations (MCQs & Essay Questions) and other course activities (Reflections, Oral Presentations & Written Assignments)

Direct Assessment:

#	Assessment Task*	Week Due	Percentage of Total Assessment Score
Summative Assessment			
1	Final Written Examination	12 th	40
Continuous Assessment			
2	Assignments	11 th	20
3	Presentations	12 th	10
4	Reflection	Continuous	10
5	Quizzes (2)	5 th & 10 th	20
6	Total		100

Indirect Assessment:

Indirect assessment method includes evaluation of the course through surveys as present in the following table.

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of Teaching	Student	Teaching Staff Evaluation Survey
Effective Teaching Practices	Staff	Peer Review Visits
Assessment Methods and Process	Student	Assessment Process Evaluation Survey
Assessment Process Verification	Staff	Internal and External Verification Process
Learning Facilities and Resources	Students	Facilities and Learning Resources Survey
Leadership	Staff	Evaluation of Leadership Survey
Course Learning Outcome Achievement	Student	Course Learning Outcomes Survey
Course Content	Student	Course Evaluation Survey Focus group discussion with students at the end of the course.

Grading System:

The grades earned by participants in the course are calculated as follows:

Percent	Rating	Rating Symbol	Rating Weight Out of 5
100-95	Exceptional	A+	5.0
90 to less than 95	Excellent	A	4.75
85 to less than 90	Superior	B+	4.5
80 to less than 85	Very good	B	4.0
75 to less than 80	Above Average	C+	3.5
70 to less than 75	Good	C	3.5
less than 70	Failed	F	2.5

Learning Resources:

Required Textbooks	<ul style="list-style-type: none"> - Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education. - Urden, L., Stacy, K., and Lough, M., 2020. Priorities in Critical Care Nursing. 8th Edition. Elsevier. - Morton, P. and Fontaine, D. (2013). Critical Care Nursing: A Holistic Approach. 10th Edition. Philadelphia: Lippincott Williams & Wilkins.
Essential References Materials	<ul style="list-style-type: none"> - Thelan, A. Urden, L. Lough, M and Stacy, K. (2018) Critical Care Nursing: Diagnosis and Management. 8th Edition. Elsevier, Mosby. - Urden, L. Stacy, K. and Lough, M. (2012). Priorities in Critical Care Nursing. 6th Edition. USA: Elsevier - Nettina, S (2010) Manual of Nursing Practice. 9th Edition. Lippincott Williams & Wilkins. - Smeltzer, S., Bare, B., Hinkle, J., and Cheever, K. 2008. Brunner and Suddarth's Textbook of Medical Surgical Nursing. 11th Edition. Philadelphia: Lippincott Williams & Wilkins.
Electronic Materials	<ul style="list-style-type: none"> - Mosby Consult Database - American Association of Critical Care (http://www.aacn.org)
Other Learning Materials	<ul style="list-style-type: none"> - NANDA - Intensive and Critical Care Nursing - American Journal of Critical Care - Journal of Advanced Nursing

Course Content:

No	List of Topics	Contact Hours
1	Introduction to critical care 1.1 Critical care nursing roles 1.2 Care management models 1.3 Ethical issues in critical care	2
2	Invasive and non-invasive hemodynamic monitoring of acutely ill patients 2.1 Hemodynamic monitoring (CVP, AL)	2
3	Management of patients with cardiac disorders 3.1 Interpretation and management of cardiac dysrhythmias 3.2 Management of patients with heart failure 3.3 Care of the patient with acute coronary syndrome	12
4	Caring of patients with respiratory disorders 4.1 Caring of mechanical ventilated patient 4.2 Management of patient type I & type II respiratory failure 4.3 Chronic obstructive pulmonary disease (COPD) 4.4 Management of patient with pulmonary embolism 4.5 Management of patient with ARDS 4.6 ABGs interpretation	12
5	Care of the Patient Experiencing Shock & Sepsis 5.1 Caring of different types of shock 5.2 Systemic Inflammatory Response Syndrome (SIRS) 5.3 Multiple organ dysfunction syndrome	8
6	Management of patients with renal disorders 6.1 Acute renal failure 6.2 Chronic renal failure 6.3 Hemodialysis including CRRT	4
7	Management of patient with neurological disorders 7.1 Neurological assessment for acutely ill patient (GCS) 7.2 Head injuries and craniotomy	6
8	Management of patient with burn injury	2
Total		48

Course Study Plan:

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
Week-1	Orientation to Advance Critical Care Nursing Course	<ul style="list-style-type: none"> Recognize the course outline, objectives and learning outcomes. Memorize the assessment methods. Identify course policies and procedures. Summarize all course requirements. 	Dr. Mohannad Dr. Jefferson	Course Specification
Week-2	Invasive and Non-Invasive Hemodynamic Monitoring of Acutely Ill Patients	<ul style="list-style-type: none"> Describe the types of catheters used for hemodynamic monitoring. Compare the normal and abnormal values obtained through hemodynamic monitoring as they relate to specific client situations. Explain nursing responsibilities in the care of the patient with invasive pressure monitoring systems, including arterial, central venous, and pulmonary artery pressure lines. Explain the normal cardiac conduction system, beginning with the sinus node and ending with the Purkinje fibers Explain how preload, afterload, and contractility determine cardiac output Define ECG as a waveform that represents the cardiac electrical event in relation to the lead 	Dr. Jefferson	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
Week-3	Management of Patients with Cardiac Disorders (Interpretation and Management of Basic Dysrhythmias)	<p>depicted (placement of electrodes).</p> <ul style="list-style-type: none"> List the seven steps of interpreting an ECG rhythm strip. Analyze elements of an ECG rhythm strip: ventricular and atrial rate, ventricular and atrial rhythm, QRS complex and shape, QRS duration, P wave and shape, PR interval, and PQRS ratio. Describe ECG criteria, causes, and management of several dysrhythmias, including conduction disturbances. 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
Week-4	Management of Patients with Cardiac Disorders	<ul style="list-style-type: none"> Describe ECG criteria, causes, and management of several dysrhythmias, including conduction disturbances. Differentiate between defibrillation and synchronized cardioversion Recognize basic concepts of cardiac pacing List causes of life-threatening dysrhythmias Summarize appropriate interventions for common dysrhythmias Employ the nursing process as a framework for care to patients with dysrhythmias. 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
Week-5	Management of Patients with Cardiac Disorders: Caring of Patients with Acute Coronary Syndrome)	<ul style="list-style-type: none"> Describe the etiology and pathophysiology of Acute Coronary Syndrome. Identify the clinical manifestations of Acute Coronary Syndrome. Describe emergent assessment and collaborative management of the person with chest discomfort. Explain the treatment of Acute Coronary Syndrome. Explain the pathophysiology and neuro-hormonal mechanisms of heart failure. Describe the hemodynamic findings indicative of heart failure. Describe collaborative management strategies appropriate for the patient with acute decompensated heart failure. Discuss nursing management of the patient with Heart Failure and Pulmonary edema. 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
Week-6	Caring of Mechanically Ventilated Patient	<ul style="list-style-type: none"> Describe the physiology of the normal anatomic structures of the ventilator pump and gas exchange units. Describe the relation between ventilation and perfusion. Outline the steps in analyzing an 	Dr. Jefferson	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
		arterial blood gas. <ul style="list-style-type: none"> Describe key diagnostic procedures used in assessment of the patient with pulmonary dysfunction. Differentiate between settings for mechanical ventilation, explaining indications or guidelines pertinent to each setting Compare and contrast common practices of weaning patients from mechanical ventilation. 		
Week-7	Caring of Patients with Respiratory Disorders PART I	<ul style="list-style-type: none"> Describe the etiology and pathophysiology of selected pulmonary disorders. Identify the clinical manifestations of selected pulmonary disorders. Identify the clinical signs and symptoms of ALI/ARDS. Discuss nursing management of the patient with ARDs 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
Week-8	Caring of Patients with Respiratory Disorders PART II	<ul style="list-style-type: none"> Differentiate between normal and abnormal ABGs results Analyze ABGs results quickly and accurately Explain the pathophysiology of acute pulmonary embolism. Summarize nursing care management of patient with pulmonary embolism. 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
Week-9	Care of the Patient Experiencing Shock & Sepsis	<ul style="list-style-type: none"> Identify the categories of shock. Discuss the etiologies and pathophysiology of hypovolemic, cardiogenic, obstructive, and distributive shock. Differentiate between systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis, and septic shock. Identify specific interventions for the management of each type of shock Explain the process of disseminated intravascular coagulation. Develop management plan for disseminated intravascular coagulation. Manage patient with disseminated intravascular coagulation. 	Dr. Mohannad	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
Week-10	Management of Patients with Renal Disorders	<ul style="list-style-type: none"> Define acute & chronic renal failure. List assessment and diagnostic measures for renal failure Explain the pathophysiology acute & Chronic renal failure. Discuss causes of acute & chronic renal failure. Discuss medical and nursing management of acute & Chronic renal failure 	Dr. Jefferson	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
		<ul style="list-style-type: none"> Define hemodialysis process. Explain the indications of hemodialysis process. 		

Date	Topic	Student Learning Outcomes (SLO) <i>By the end of the session, you should be able to:</i>	Speaker	Reference
Week-11	Management of Patient with Neurological Disorders	<ul style="list-style-type: none"> Review of anatomy and physiology of the nervous system Discuss patient assessment of the nervous system alterations and neuro-diagnostic studies Describe anatomy and physiology of Central nervous system (CNS) List primary and secondary causes of increased intracranial pressure. Discuss nursing responsibilities in the care of a patient, with intracranial pressure monitoring Identify assessment areas to the diagnosis of neurologic dysfunction. Describe diagnostic procedures used for assessment of suspected neurologic disorders. Explain the significance consequences of traumatic brain injury. Compare and contrast epidural, subdural, and subarachnoid hemorrhages Discuss the collaborative management of the patient with a severe traumatic brain injury. Compare ischemic and hemorrhagic cerebrovascular accident in terms of their causes, clinical manifestations, prevention, and nursing and medical management. Identify definition, the mechanisms of injury, and clinical signs and symptoms for patients with traumatic brain injuries. 	Dr. Jefferson	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.
Week-12	Management of Patients Burn Injury	<ul style="list-style-type: none"> Define the classification of a burn injury including its degree and depth. Recognize the pathophysiology of burn injury. Identify the methods in differentiating the percentage of body area. Recognize emergency management for patient with burn. 	Dr. Jefferson	Burns, S., and Delgado, S., 2019. AACN Essentials of Critical Care Nursing. 4th Edition. McGraw-Hill Education.

Communication and Attitude:

- Communicate and behave in a professional and respectful manner with Patients / Family, FCMS Faculty Staff, Clinical Instructor, Preceptor, Colleagues, and Other Multidisciplinary Team Members.
- Follow defined chain of commands during communication.
- Use proper and respectable words and voice tone in verbal communication.
- Illustrate proper and respectful body language and facial expressions in non-verbal communication.
 - ✓ Share the course learning objectives with the FCMS Faculty Staff.
 - ✓ Participate in all session's discussions.
- Accept constructive feedback and comments of FCMS Faculty Staff and Peers.

Punctuality Guidelines:

- Arrive on time (not to be late more than (10) minutes).
- Attend all sessions unless an official excuse is provided by the participant.
- Respect the approved break times.
- Do not leave the session's site/ area before you take permission from FCMS Faculty Staff.

Commitment:

- Communicate and behave in a professional and respectful manner with FCMS Faculty Staff, Colleagues, and Other Multidisciplinary Team Members.
- Comply with the FCMS and DSFH policy and procedures.
- Sustain a professional appearance (uniform, hair, nails, shoes, communication, chewing gum and use of mobile phone).
- Accept and complete projects, tasks and assignments given by the FCMS Faculty within a given time.

FCMS Examination Policy:

- Re-sit Exam:** This exam conducted for those who get less than 70% of the total course score or those with unaccepted or no excuse to attend the final examination.
- Academic warning:** is given to those who have absenteeism more than 25%, with unaccepted or no excuses for examinations and all with any academic misconduct according to MOE bylaws.



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