

DE ANZA COLLEGE
Complex Health Challenges (N95)
Greensheet Fall 2024

Instructor: Kholoud Hardan-Khalil

Office: Virtual

Office Hours: Thursday 4-5:30 PM

Email: Khalilkhouloud@fhda.edu

Zoom: <https://fhda-edu.zoom.us/j/82981925860>

Prerequisites: NURS 94, 94A, 94AL, and 94L

Co-requisites: NURS 95L

Modality: Synchronous Online

Class Days/Times: Thursday 12:00- 3:50 pm

Class Location: Online via Zoom

Course Description

This course builds on prior learning experiences to develop knowledge and skills used in the management of nursing care of patients experiencing complex health challenges and rapid changes in health status. It also integrates the knowledge of pathophysiology, diagnostics, pharmacology, communication concepts, and therapeutic interventions in order to facilitate culturally congruent nursing care for patients with complex variations in health patterns.

Students will become increasingly competent in the application of nursing processes, research, problem-solving and use of clinical judgment. Both NURS 95 and NURS 95L must be taken and passed concurrently within the same quarter (failure of either component requires both courses to be retaken).

Student Learning Outcomes (SLO)

Upon successful completion of this course, students will be able to:

- SLO1 Identify the goals and priorities in the management of care of unstable adult patients experiencing rapid changes in health status using the nursing process.
- SLO2 Identify the goals and priorities of care for adult patients experiencing multisystem failure using the nursing process.

Course Objectives

- A. Assess complex patient problems, needs, and data trends necessary for the management of the care of critically ill adult patients.
- B. Examine the principles of communication with critically ill adult patients, families and staff, in order to foster mutual respect, shared decision making, and enhance patient satisfactions and health outcomes.
- C. Use information and technology to facilitate communication, manage knowledge, mitigate errors, and support decision-making within the context of care of critically ill adult patient.
- D. Evaluate the role of the registered nurse in influencing the behavior of individuals or groups of individuals, including critically ill adult patients, within their environment in a way that facilitates the establishment and acquisition of shared goals.

- E. Explore the role of interdisciplinary teams and shared decision making in the planning and delivery of care for critically ill patients.
- F. Identify, evaluate, and integrate the best current evidence with clinical expertise and consideration of patient preferences, experience and values to make practice decisions for a critically ill adult patient.
- G. Discuss the use of data to monitor the outcomes of care and examine approaches to improve the quality and safety of health care systems and individual performance, thus minimizing the risk of harm to critically ill adult patients and providers.
- H. Examine accountability for and approaches to the delivery of standard-based nursing care that is consistent with moral, altruistic, legal, ethical, regulatory, and humanistic principles, within the context of care of critically ill adult patients.
- I. Develop appreciation for the patient or designee as the source of control and full partner while providing compassionate and coordinated care based on respect for the critically ill adult patient's preferences, needs and cultural values.

Course Outline of Subject Matter

a. Cardiovascular Assessment & Alterations

- Basic electrophysiology and mechanical events in the heart.
- Interpretation of basic dysrhythmias generated from the sinoatrial node, the atria, the atrioventricular node, and the ventricles.
- Interventions for dysrhythmias
- Basic concepts of cardiac pacing
- Collaborative and nursing management of the patient with acute coronary syndrome, acute myocardial infarction, cardiogenic shock, and abdominal aortic aneurysm.

b. Ventilatory Assistance

- Review of anatomy and physiology of the respiratory system
- Methods for assessing the respiratory system, including physical assessment, interpretation of arterial blood gases, and noninvasive techniques
- Indications for initiation of mechanical ventilation
- Types and modes of mechanical ventilation
- Complications associated with mechanical ventilation (incl. pneumothorax, chest tube principles and care)
- Methods for weaning patients from mechanical ventilation
- Formulate a plan of care for the mechanically ventilated patient

c. Pulmonary Disorders

- Pathophysiology of acute respiratory failure
- Etiology, pathophysiology, assessment, nursing diagnoses, interventions, and outcomes for acute respiratory failure in the patient with adult respiratory distress syndrome, chronic obstructive pulmonary disease, asthma, pneumonia, and pulmonary embolus.
- Formulate a plan of care for the patient with acute respiratory failure

d. Concepts of Hemodynamic Pressure Monitoring

- Physiological basis for hemodynamic monitoring in critically ill patients.
- Indications, measurement, complications, and nursing implications

associated with monitoring of invasive right atrial, left atrial, pulmonary artery, and intra-arterial pressures and those equated with noninvasive monitoring of hemodynamic indices.

- Appropriate nursing actions for patients with alterations in hemodynamic values.

e. Shock and Sepsis

- Definitions of shock, SIRS, MODS and their continuum
- Four classifications of shock to their pathophysiology
- Progression of shock through three stages
- Relationship of assessment findings to the classification and stage of shock
- Management strategies for each type of shock
- Individualized plan of care for patients with shock, SIRS, MODS, that includes nursing diagnosis, expected outcomes, nursing interventions, and rationale

f. Hematologic disorders

- Pathophysiology of hematological system
- Nursing and medical management of patients with anemias, thrombocytopenia, disseminated intravascular coagulation (DIC).

g. Acute Kidney Injury

- Pathophysiology of the three categories of acute kidney injury
- Systemic manifestations of acute kidney injury
- Methods for assessing the renal system, including physical assessment, interpretation of serum and urine laboratory values, and radiological diagnostic tests
- Medical and nursing management of the patient with acute kidney injury
- Nursing assessment and care of the patient receiving dialysis or continuous renal replacement therapy

h. Nervous System Alterations

- Pathophysiology of increased intracranial pressure
- Nursing and medical management of patients with increased intracranial pressure
- Pathophysiology of head injury, complications, collaborative management
- Nursing and medical management of patients with spinal cord injury, cerebrovascular disease, status epilepticus/seizure disorders.

i. Gastrointestinal Alterations

- Pathophysiology, assessment, nursing diagnoses, outcomes, and interventions for acute upper gastrointestinal bleeding, acute pancreatitis, and hepatic failure.

j. Endocrine Alterations

- Disorders resulting from alterations in hormones secreted by the pancreas, adrenal, thyroid, and posterior pituitary glands.
- Pathophysiology, assessment, nursing diagnoses, interventions and outcomes for hyperglycemic crises, hypoglycemic crisis, adrenal crisis, thyroid storm, myxedema coma, diabetes insipidus, and the syndrome of inappropriate antidiuretic hormone.

k. Trauma Management

- Mechanisms of traumatic injury commonly seen in the critical care setting
- Prehospital care, emergency care, and resuscitation of the trauma patient
- Assessment and management of common traumatic injuries
- Nursing interventions for care of the trauma and burn patient, including prevention of complications.

Textbooks and Resources

a. Required

Sherpath for Sole Introduction to Critical Care Nursing, 8th Edition

ISBN: 9780323872164

Course ID: 165506_deanza1_1008

Sole, M.L., Klein, D.G., & Moseley, M.J. (2021). *Introduction to critical care nursing* (8th ed.). St. Louis: Elsevier.

b. Recommended

Baird, M.S. (2022). *Manual of Critical Care Nursing: Interprofessional Collaborative Management* (8th ed.). St. Louis: Elsevier Mosby.

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2023). *Mosby's diagnostic and laboratory test reference* (16th ed.). St. Louis, MO: Mosby. [or another laboratory reference book]

Skidmore-Roth, L. (2023). *Mosby's 2023 nursing drug reference* (36th ed.). St. Louis, MO: Mosby. [or another current drug reference]

Urden, L.D., Stacy, K.M., & Lough, M. E. (2022). *Critical Care Nursing: Diagnosis and Management* (9th ed.). Elsevier.

Learning Management System

Students must have a De Anza account to access the course on Canvas. If you cannot access the course, you may not be correctly registered for N95. It is your responsibility to check your Canvas account regularly (daily, as it will be used for communication, posting important documents, posting grades, etc.

Canvas Access

To access this course on Canvas, you will need access to the Internet and a supported Web browser (Firefox or Google Chrome are the recommended browsers). You log in to Canvas with your Campus ID and password.

Course Requirements:

- A. Quizzes:** Students will be given six announced Canvas quizzes on dates specified in the course lecture schedule. Quizzes will be given any time during the

lecture and designed to assess students' knowledge of the content covered the week before (see lecture schedule). Attendance is required to take the quiz. There will be **NO remediation** for any of the missed quizzes.

B. Assignments:

1. **Sherpath Assignments** (Assigned lessons and case studies).
 - **Sherpath lessons:** Students must complete **ALL** assigned lessons with a score of 100% on Wednesdays no later than 11:59 before to receive assignment credit.
 - **Sherpath case studies:** Students are expected to complete the assigned case studies on Sundays no later than 11:59 pm. The weekly assigned case study(s) will be available after the lecture and are due on Sunday at 11:59 p.m. (See the course lecture schedule.)

C. Exams:

1. **Midterm Exam:** One midterm exam on 11/07/24 at **12:00 pm**
2. **HESI Practice Test:** 11/07/24 at **1:50 pm**. A student is responsible for registering before the assessment date/time.
3. **Final Exam:** The final exam is on 12/10/24 at noon. It is cumulative and **covers all the course content.**
4. **HESI Exam:** The HESI exam is on 12/10/2024 at 1:50 pm. Students must register **before the assessment date/time.**

All exams/quizzes will be monitored online via Zoom with the camera open. The surroundings and background show NO study materials or notes are used.

D. HESI Remediation:

All students are required to complete HESI remediation. The midterm remediation is due on 11/14/24 at 5 p.m., and the final remediation is due on 12/13/24 at 5 p.m.

Grading Policies

Grades for the course are calculated as follows:

Assignment/ Exam	Percentage
Sherpath Lesson (10)	5%
Sherpath Case Study (10)	5%
Quiz (6)	20 %
Midterm Exam	25 %
HESI Assessment- Midterm	5%
HESI Remediation-Midterm	2.5%
Final Exam	25%
HESI Assessment- Final	10%

HESI Remediation- Final	2.5%
TOTAL	100%

Grades will be based on student participation and completion and submission of assignments **on time**. College standards will assign final letter grades.

Grade	Numerical value
A	90-100%
B	80-89.99%
C	75-79.99%
F	<75

Passing this course requires a “C” (75%) or better grade. Failure in the course (less than 75%) requires PI, including test analysis conducted by the student and approved by the faculty of record and other PI components as per De Anza Nursing Department policy. Extra credit assignments are not accepted, and the final grade will **NOT** be rounded.

Methods of Instruction

The class will be delivered synchronously online. Students are expected to join the class on Thursdays at noon via [Zoom](#).

Attendance/Participation

1. Attendance is **Mandatory**.
2. Students are **required** to be present online with **cameras on** during **ALL** Zoom lectures and are **not allowed to shut off the camera** (Counts as participation during lecture)
 - a. If a student does not show up on camera and doesn't inform the instructor ahead of time or within the timeframe of the event happened: (I.E., Computer issues, bathroom, etc.), the student will be counted as **NO show** and will have to **MAKE UP** for that day not present.
 - b. Students are responsible for initiating a conference with the instructor to determine “make-up” experiences for absences.
3. Students are expected to be on time for ALL class meetings. Chronic tardiness will not be tolerated, resulting in a **Plan for Improvement** (PI). Chronic tardiness in this course is defined as two instances of arriving ten (10) minutes behind the scheduled time over twelve weeks.
4. Active participation is a requirement for attendance.
5. Throughout the course, students are expected to check their student e-mail accounts several times weekly and respond to instructor messages within 48 hours.

Make a Recording Policy and Sharing Information

To ensure compliance with the Family Education Rights and Privacy Act (FERPA), student recording of class lectures or other activities is generally prohibited without the explicit written permission of the instructor and notification of other students enrolled in the class section.

Exceptions are made for approved accommodations under the Americans with Disabilities Act. Faculty may record lectures and other class activities to facilitate instruction, especially for classes taught remotely through Canvas. Participation in such activities implies consent for the student to be recorded during the instructional activity. Such recordings are intended for educational and academic purposes only.

Common courtesy and professional behavior dictate that you notify someone when you are recording them. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private study purposes only. The recordings are the instructor's intellectual property; you have not been given any rights to reproduce or distribute the material.

Course material the instructor develops is the instructor's intellectual property and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor-generated material for this course, such as exam questions, lecture notes, or homework solutions, without the instructor's consent.

Drop Policy

Students are responsible for dropping a class and must fill out the appropriate paperwork by the deadline to officially drop the course.

Support Services

DeAnza College makes reasonable accommodations for persons with disabilities. Students

should contact DSP&S (Disability Support Programs and Services):

<http://deanza.edu/dsps>

Other Services

DeAnza offers various support services to help you through your college career. Services such as tutoring, short reading and writing skills classes, financial aid, and programs in educational transition and help for disabled students are offered for your benefit:

<http://deanza.edu/student-services>

<http://deanza.edu/student-success>

Academic Dishonesty

DeAnza College (and this instructor) has a strict no-cheating/ plagiarism policy. Students found cheating or plagiarizing on class examinations, quizzes, or homework will receive a grade of zero and may be dropped from the course. Students in this course must additionally abide by the rules set out in the student handbook (<http://www.deanza.edu/bhes/StudentHandbook.pdf>)

Course Evaluation

Complete an online "Course Evaluation" and include written comments at the completion of the course. Each instructor reads and considers each evaluation and all comments when making modifications to her/ his course. Also, the Nursing Department Curriculum Committee reviews a summary of all course evaluations each year. All evaluations are to be completed anonymously.

Please follow these directions:

- a) Go to the nursing webpage (www.deanza.edu/nursingstudentsonly)
- b) Scroll to the bottom, where it is labeled: 'Evaluation Links.'
- c) Enter your 8-digit SID to continue and find the appropriate course. There are two separate links for the two different evaluation materials:

1. Student Evaluation - Written Comment Form:

Download the page. Complete it online, put it online, print it off, and turn it into the designated student representative on the scheduled date. It is to be anonymous.

2. Theory Evaluation:

Complete and submit an online anonymous evaluation of the theory class.

To save paper, please copy the evaluation completion receipt, paste it into an e-mail and send it to your instructor as proof of completion. It is a requirement to do this as you evaluate each course.

You must evaluate the nursing course BEFORE taking the final exam.

All assignments are due as outlined in the course syllabus to complete the deliverables.

Policy on Civility

As members of the De Anza community, we are committed to ensuring an environment where learning and the creation and dissemination of knowledge are foundational goals and where freedom of speech and expression is viewed as an essential characteristic of a community of nursing students. To reach these goals, we must foster a climate where civility is valued, appreciated, and expected and where all community members are treated with dignity, respect and care. **Everyone is treated with respect.**

Cell phones must be turned off during the scheduled class unless being used for a class activity. Texting is **not** permitted.

Appropriate Online Behavior

Students are expected to use general netiquette and civil interactions in all forms of

communication, including digital communication. Please visit the [Core Rules of Netiquette website](#) to become familiar with netiquette.

Netiquette for Email should include the following:

- Use a descriptive subject line that is appropriate to the subject and easy to understand: include your course and section number
- Start with a greeting; for example, "Hello Dr. XX or hellos Professor XX"
- Keep your email brief but specific
- Spell check and proof-read before sending
- Do not use capitalization, as it may seem like you are shouting and set the wrong tone
- Keep your email organized
- Always use a professional tone
- Avoid attachments unless you are sure your recipients can open them
- Think before you send the email to more than one person. Does everyone need to see your message?
- When replying to all, make sure you really want everyone to receive your response and ask yourself if it is necessary for everyone to see the message.
- Before passing along a message and selecting the "forward" button, make sure that the original author intended for the information to be passed along.
- Sign your message with your name and return email address
- Writing in a large font is not acceptable.

Technology Requirements & Information

Students are required to have access to the Internet. A personal email account is provided by the College and **MUST** be used by the student. **Please note:**

Students who do not use their university email accounts will miss important information.

Students are expected to have basic word processing skills, use Canvas, be able to navigate the internet and meet the minimum hardware and software requirements.

Student's Responsibilities: Content of Announcements, Syllabus, and Program Surveys
Students are responsible for information and/or directions given verbally in Zoom class meetings, through Canvas, or via email announcements. If a student is not present during a class meeting, the student should plan to secure information from other students. In addition, students are required to carefully read the syllabus as they are responsible for its content and fulfilling all course requirements identified within the syllabus.

Office Hours/Contact

Email khalilkhouloud@fhda.edu is a quick way to contact your online instructor.

You can expect a response within 48 hours or less.

Complex Health Challenges (N95)
 Fall 2024
 Weekly Lecture and Assignment Schedule
 Thursday, 12:00- 3:50 pm via [Zoom](#)

- Instructor: Kholoud Hardan-Khalil, Ph.D., MSN, RN, CCRN
- Textbook: Sole, M. L., Klein, D. G., & Moseley, M. J. (2021). *Introduction to critical care nursing* (8th ed.)

Week	Topics	Assigned Readings/Activities	Exams/Quizzes
Week # 1 09/26/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	<ul style="list-style-type: none"> • Introduction to Complex Health Challenges Course • Cardiovascular alterations 	<ul style="list-style-type: none"> • Chapter 13 • Assigned Sherpath activities. • Posted learning materials 	Review the course syllabus and lecture schedule
Week # 2 10/03/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	<ul style="list-style-type: none"> • Ventilatory assistance • Acute respiratory failure 	<ul style="list-style-type: none"> • Chapter 10 & 15 • Assigned Sherpath activities. • Posted learning materials 	Quiz #1 <ul style="list-style-type: none"> • Cardiovascular alterations
Week # 3 10/10/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	<ul style="list-style-type: none"> • Hemodynamic monitoring • Shock, sepsis, and multiple organ dysfunction syndrome • Hematological disorders 	<ul style="list-style-type: none"> • Chapter 9, 12, 17 • Assigned Sherpath activities. • Posted learning materials 	Quiz # 2 <ul style="list-style-type: none"> • Ventilatory assistance • Acute respiratory failure
Week # 4 10/17/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	<ul style="list-style-type: none"> • Acute Kidney Injury 	<ul style="list-style-type: none"> • Chapter 16 • Assigned Sherpath activities. • Posted learning materials 	Quiz # 3 <ul style="list-style-type: none"> • Shock, sepsis, and multiple organ dysfunction syndrome • Hemodynamic monitoring • Hematological disorders

Week # 5 10/24/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	Gastrointestinal alterations <ul style="list-style-type: none"> • Nutritional Therapy 	<ul style="list-style-type: none"> • Chapter 7,18 • Assigned Sherpath activities. • Posted learning materials 	Quiz # 4 Acute kidney injury
Week # 6 10/31/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	<ul style="list-style-type: none"> • Nervous system alterations 	<ul style="list-style-type: none"> • Chapter 14 • Assigned Sherpath activities. • Posted learning materials 	Quiz # 4 Gastrointestinal alterations
Week # 7 11/07/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	Midterm HESI Practice Test	<ul style="list-style-type: none"> • Chapter 9,10,12, 13,14,15,16,17 • Assigned Sherpath activities. • Posted learning materials 	Midterm <ul style="list-style-type: none"> • Cardiovascular alterations • Ventilatory assistance • Acute respiratory failure • Shock, sepsis, and multiple organ dysfunction syndrome • Hemodynamic monitoring • Hematological disorders • Acute Kidney Injury • Gastrointestinal Alterations • Nervous system alterations
Week # 8 11/14/24 Time: 12:00-3:50 pm	Endocrine Alterations	<ul style="list-style-type: none"> • Chapter 19 • Assigned Sherpath activities. • Posted learning materials 	
Week # 9 11/21/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	Dysrhythmia Interpretation and Management	<ul style="list-style-type: none"> • Chapter 8 • Assigned Sherpath activities. • Posted learning materials 	Quiz # 5 <ul style="list-style-type: none"> • Endocrine Alterations

Week #10 11/28/24			
Happy Thanksgiving			
Week # 11 12/05/24 Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	Trauma and Surgical management Burns	<ul style="list-style-type: none"> • Chapter 20, 21 • Assigned Sherpath activities. Posted learning materials 	Quiz # 6 <ul style="list-style-type: none"> • Dysrhythmia Interpretation & Management
Week # 12 12/10/24 (Tuesday) Zoom Synchronous Online Zoom Time: 12:00-3:50 pm	Final Exam HESI Assessment- Final	All course content	Final Exam HESI Assessment