CENTRAL TEXAS COLLEGE
VNSG 1429
MEDICAL-SURGICAL NURSING I

Semester Hours Credit: 4
16 Week Class

INSTRUCTORS: _______________________

OFFICE HOURS: _____________________

I. INTRODUCTION

A. **Course Description:** Application of the nursing process to the care of the adult patient experiencing medical-surgical conditions along the health-illness continuum in a variety of health care setting. **End-of-Course Outcomes:** Identify the components of the health-illness continuum; identify prevalent medical-surgical conditions affecting the adult; and utilize the nursing process to assist in developing a plan of care for selected medical-surgical conditions.

B. This is a required course in the Vocational Degree Nursing curriculum.

C. This course is occupationally related and serves as preparation for careers in nursing (Vocational Degree Nursing).

D. **Prerequisites:**
   1. BIOL 2401: Anatomy and Physiology I
   2. HPRS 2300: Pharmacology
   3. VNSG 1126: Gerontology
   4. VNSG 1323: Basic Nursing Skills
   5. VNSG 1222: Vocational Nursing Concepts
   6. VNSG 1227: Essentials of Medication Administration
   7. VNSG 2331: Advanced Nursing Skills
   8. VNSG 1160: Clinical Practical Nurse I

E. **Co-requisites:**
   **Fall Admissions:**
   VNSG 1301: Mental Health & Mental Illness
   VNSG 1219: Leadership & Professional Development
   VNSG 1560: Clinical Practical Nurse II

   **Spring Admissions:**
   VNSG 1230: Maternal/Neonatal Nursing
   VNSG 1234: Pediatrics
   VNSG 1360: Clinical Practical Nurse II

F. **Policy:** Dependent on Spring or Fall admission, the student will refer to the specific curriculum degree plan and follow that progression pattern.
G. Secretary’s Commission on Achieving Necessary Skills (SCANS) and Differentiated Essential Competencies (DECs)

Alphanumeric coding used throughout the syllabus denotes the integration of SCANS occupational competencies (C) and foundation skills (F). The DEC competencies that are implemented in VNSG 1429 are also alphanumeric coded as: Member of the Profession (MOP), Provider of Patient-Centered Care (PPCC), Patient Safety Advocate (PSA), and Member of the Health Care Team (MHCT). The complete delineation of Texas Board of Nursing Differentiated Essential Competencies (DECs) is found at https://www.bon.texas.gov/pdfs/differentiated_essential_competencies

II. LEARNING OUTCOMES

Upon successful completion of this course, VNSG 1429: Medical Surgical Nursing I, the student will:

A. Discuss the uniqueness of the gerontologic patient related to physical, mental, and emotional changes associated with the aging process. (PPCC 1, 2 MHCT 3) (C5, C6, C7, C15)

B. Describe the psychosocial, growth and development, and physiological needs of patients across the life span. (PPCC 1) (C15, F5, F6, F7, F8, F9, F10, F11, F12)

C. Identify primary health care needs of the client. (PPCC 1-2) (F9, F10, F12)

D. Identify the basic interventions to support the patient and family during life stages including death and dying. Incorporate nutrition, drug therapy, and nursing interventions in developing plans of care to meet the needs of patients from culturally, ethnically and socially diverse backgrounds that are experiencing common medical-surgical health problems. (MOP 1-2; PPCC 1-2) (F3, F4, F5, F7, F8, F9, F10, F12, F15, F17)

E. Identify pharmacological agents and related nursing interventions. (MOP 1, PSA 1-2) (F1, F3, F4, F9, F10, F11, F12)

F. Demonstrate competency in dosage calculations. (PSA 1-2) (C7, F3, F4)

G. Compare and contrast normal physiology of body systems to pathologic variations in the patient with medical-surgical health problems; evaluate and treat patients with medical-surgical health problems using the nursing process (PPCC 1-2, MHCT 1) (C1, C5, C7, F8, F9, F10)

H. Utilize systematic approach in developing a plan of care or concept map for the patient with common medical-surgical health problems. (PPCC 1-2) (C1, C5, C6, C7, C8, C9, C14, F1, F2, F5-12, F13, F15, F16)

I. Demonstrate behaviors that are congruent with the ANA Code of Ethics, Scope and Standards of Practice, and Social Policy Statements in all class related interactions. (C9, C11, C14, F1, F5-6, F8-9, F11, F13-17) (MOP1-2) (PPCC 1-2) (PSA 1-2) (MHCT 1-3)
III. INSTRUCTIONAL MATERIALS

A. Instructional materials:
1. The instructional materials for this course are viewable through [www.ctcd.edu/books](http://www.ctcd.edu/books)
3. Access to Evolve web page at [http://evolve.elsevier.com](http://evolve.elsevier.com)
5. #2 Mechanical Pencils
6. Scantrons

B. Computer Accessibility:
Accessibility to computer hardware and software that will support the completion of assignments on the internet, DVD, CD, or other electronic delivery is required. All Associate Degree and Vocational Nursing courses (RNSG, VNSG and HPRS), whether traditional, blended, or online utilize Blackboard Learning Management System tools for communication and course requirements. Other online components, such as publisher online resources, online activities, or database searches may also be required. It is expected that students enrolled in RNSG, VNSG or HPRS courses have access to a computer with minimum technical requirements, have a consistent and reliable Internet connection, possess basic computer skills, and have the ability to download and install applications or plug-ins. Online components/requirements may be completed in a CTC computer lab or on a home computer. Students are recommended to familiarize themselves with the locations and available hours of CTC computer labs in the event that home computers or Internet access are unavailable or unreliable. No extensions or alternate due dates for assignments or exams will be granted due to computer or Internet difficulties.

C. Supplementary Readings:
Selected web sites:
- [http://bon.state.tx.us](http://bon.state.tx.us)
- [http://www.cdc.gov/](http://www.cdc.gov/)
- [http://www.diabetes.org](http://www.diabetes.org)
- [http://www.aao.org/](http://www.aao.org/)
- [http://www.ameriburn.org/](http://www.ameriburn.org/)
- [http://www.sgna.org/](http://www.sgna.org/)
- [http://www.nursingworld.org/](http://www.nursingworld.org/)
- [http://www.nursingcenter.com](http://www.nursingcenter.com)
- [http://www.m.com](http://www.m.com)

D. Supplementary Materials: Various electronic media systems, computer software, web sites, experiential group exercises, and simulated situations as suggested by the faculty to enhance clinical practice in nursing are used.

E. References: Current professional nursing journal article readings are used to supplement dated textbook information.

F. Library Resources: It is expected that all students will have a working knowledge
of the Oveta Culp Hobby Memorial Library and off-site access to library resources.

G. Current practice guidelines set forth by Occupational Safety & Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) related to safe patient handling and ergonomics will be implemented.

H. Six areas of core competencies, as delineated by the Quality and Safety Education for Nurses (QSEN) project, will be taught and evaluated in relation to the course objectives and content for VNSG 1429. The (QSEN) project is to meet the challenge of preparing future nurses who will have the knowledge, skills and attitudes (KSAs) necessary to continuously improve the quality and safety of the healthcare systems within which they work. The seven core competencies are Patient-Centered Care, Teamwork, and Collaboration, Best Practices, Quality Improvement, Safety, and Informatics.

IV. COURSE REQUIREMENTS

A. Reading Assignment: An orientation to class will be provided on the first day of the course. In preparation for all lectures, it is expected that the student first read the lecture objectives and then the assigned required reading. Reading assignment can be found on the VNSG Course Calendar that is posted on Blackboard. It is essential the student have a working knowledge base of anatomy and physiology and growth and development. Periodically, written homework and announced/unannounced quizzes from the assigned readings. In preparation for all classes, students are required to obtain the Daily Plan and the VNSG 1429 Course Syllabus from the Central Texas College Blackboard website, read the objectives, text, and any materials related to that unit of study prior to class. The signature sheet at the end of the syllabus must be printed off, signed and dated by the student to acknowledge their understanding, and turned into the course faculty on the first day of class.

B. Projects, Oral Reports, Case Studies, Presentations, Written Assignments

Submitting Written Assignments: All written assignments are to be completed independently unless instructed otherwise. All assigned written work must be submitted at the designated time. Late papers will receive a grade of “0” points.

Project/Oral Presentation: Course requirements include a group presentation as a portion of the participation grade. Presentations must be made on the designated class day, no make-ups will be allowed.

1. HESI Testing and Remediation: It is mandatory for VN student’s at all three levels of the program to participate in the HESI program. Detailed diagnostic reports at the end of the semester (online exams) provide the student immediate results and opportunity for remediation. Failure to achieve satisfactory results on the proctored HESI exams will require the student to remediate. Failure to remediate could result in the student not being permitted to register for subsequent classes. Failure to take an exam will result in course failure.
2. **HESI Testing:**

Health Educations Systems Inc., (HESI) testing must be completed by the assigned due date. Failure to successfully complete all assigned exam(s) will result in an “Incomplete” (IP) grade for the course. The student will complete the required proctored Evolve Reach Specialty (HESI) exam for each designated VNSG course as scheduled by the faculty. The student must successfully complete the required HESI exam(s) for each semester at or above the HESI National Average Score on the scheduled date. Students who do not score at or above the HESI National Average Score will be required to complete remediation. Failure to complete remediation requirements will result in an incomplete (IP) for the course.

An Evolve Reach Specialty Exam will be scheduled in Semesters 1, 2, and 3 during these courses: VNSG 2331 (Fundamentals of Nursing), VNSG 1301 (Mental Health), VNSG 1429 (Medical/Surgical Nursing and Pharmacology), and VNSG 1432 (PN Exit).

If the composite score of the Evolve Reach Specialty Exam is less than the HESI National Average Score, a required counseling session with the course faculty will be held. Statistical data generated according to student responses will be available through the Evolve site [https://evolve.elsevier.com/staticPages/s_index.html](https://evolve.elsevier.com/staticPages/s_index.html) for each student for the purpose of self-directed remediation in identified areas that do not meet the HESI National Average Score.

**HESI Testing in Semester 3:** The PN Exit exam will be given during semester three in VNSG 1432. The exam will be administered and completed on the scheduled dates. Two attempts will be required for completion of the PN Exit exams. The PN Exit exams provide a conversion score, which is a weighted percentage score. The highest conversion score attained will be used as the student’s final exam grade.

All HESI PN Exit Exams (two) are mandatory for all third semester students. All students who obtain a score of 901 or greater are required to complete 2 hours of remediation PRIOR to taking the PN Exit 2 exam. Students obtaining 900 or less are required to complete 4 hours of self-remediation PRIOR to taking the PN Exit 2 exam. Any student not passing the PN Exit 1 exam with a recommended score of at least 850 must schedule a counseling session with a faculty facilitator and remediation must be documented. Counseling and remediation are mandatory, failure to take both exit exams or complete required remediation will result in course incomplete (IP). The final grade will not be configured until meeting the above requirements.

Any student repeating a course will be required to re-take the HESI exam associated with that course even if the student passed the HESI exam the first time.

Students with documented disabilities may request accommodations for these standardized exams. The student must contact the faculty at the start
of each semester to activate and adopt approved accommodations.

C. Class Performance:
   1. Attendance Policy: VNSG 1429 adheres to the departmental attendance policy published in the Department of Nursing and Allied Health Student Handbook. Also, refer to the college catalog “Attendance Policy”. Classroom absence may negatively impact the student’s performance on examinations and will negatively impact the class participation grade.
      a. Classroom: If absences occur from the classroom, it is the student’s responsibility to obtain missed material from peers.
      b. Attendance at Examinations: Written examinations will be given on dates noted on the Course Calendar.

   2. The faculty reserves the right to adjust the student’s classroom grade based upon classroom performance/behavior/civility.

   3. You may not audiotape a lecture without the faculty’s/presenter’s permission. No taping of copyrighted material will be allowed.

   4. Beepers and cellular phones must be turned off in the classroom, lab, and clinical areas. Failure to comply will result in “0” participation points for the class day.

   5. Should a student fail to attend mandatory clinical orientation they will immediately be administratively withdrawn from clinical and all corequisite courses.

   6. All students are required to attend the Semester General Assembly on the designated day and time each semester as posted.

D. Class Participation:
   Students are expected to attend class prepared, to contribute to class discussion, and to participate in all class activities. The participation grade for theory courses will include positive contributions to class, meeting activity objectives, and demonstrating civility. Failure to participate will result in grade point deduction.

E. Other requirements:
   1. Following an illness or other medical or mental health-related event, during the duration of the program, the student may be required to obtain “Student Nurse Medical Release Return to Class/Clinical” from their health care provider prior to returning to the classroom/clinical agency. The required release must include 1) when the student can return to school/clinical and 2) specific limitations on activity level, if any. The form must be faxed or mailed from the health care provider’s office or submitted in a sealed envelope. Please see the Department of Nursing office or Blackboard for the official form.

   2. The student scoring <70% on any exam must make an appointment with the course faculty for exam review and counseling within one (1) week after completing the exam. It is the student’s responsibility to make the appointment with the instructor(s) if student scored <70% on an exam.
3. A student in academic jeopardy will be required to make an appointment with the Department of Nursing Assistant Chair for further assistance, counseling, and recommendations for academic success.

F. Progression: A student must successfully complete VNSG 1429 and the identified co-requisite courses in order to progress to the next semester.

If failure or withdrawal for any reason occurs from any of the co-requisite nursing courses, withdrawal from the corresponding clinical course is required.

A student who fails the same VNSG course twice is ineligible to continue in the program.

G. Scholastic Honesty: The following statement is published in the Central Texas College Catalog and all VNSG 1429 students are expected to abide by this policy.

“All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and during examinations. The following are considered examples of scholastic dishonesty:

1. Plagiarism - the taking of passages from the writing of others without giving proper credit to the sources.
2. Collusion - using another’s work as one’s own, or working together with another person in the preparation of work, unless such joint preparation is specifically approved in advance by the instructor.
3. Cheating - giving or receiving information on examinations.”

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of “F” and subject to disciplinary action, which may include suspension and expulsion.” VNSG 1429 students are expected to abide by this policy.

H. Office Hours: Each faculty member keeps office hours for the purpose of conferring with students. Students are encouraged to make appointments with the faculty to discuss their needs and/or problems related to VNSG 1429. Please use the phone at the reception desk to call the faculty member’s office before your appointment.

I. Open Lab: Open Lab days will be available for students who wish to practice skills out of regular lab time. Open Lab days and time will be specified on the Course Calendar. If a student wishes to attend the Open Lab days, they must notify the Lead Instructor of their intent to participate by noon the day before Open Lab day. No grade or extra credit will be given for attending.

V. EXAMINATIONS

1. Exams can consist but not exclusive of:
   a. Multiple choice questions.
   b. Alternate format questions
   c. Dosage calculations must reveal the methodology utilized to acquire the answer.
   d. Essay
2. The student will be allowed (as close to) 1.5 minutes per test item as is possible, given the class schedule time. The posted CTC schedule allows two hours for a final exam.

3. Testing Policy: Answers to all questions must be entered on the Scantron by the student. Dosage calculation answers will be written on the back of the Scantron by the student to receive credit. Once the student has submitted the Scantron for grading no changes/additions can be made to the form with the exception of the instructor marking it after grading of calculation problems and alternate format questions. Students will not have further access to the Scantron once it has been submitted. The ParScore™ Scantron form is the only acceptable form for exam grading. Students must check it carefully before submitting it. Personal belongings, such as back packs, and purses, cellular phones, laptops will be secured in your personal vehicle during the exam. Once your exam and Scantron is turned in you then may retrieve your belongings and supplies needed for class.

4. An exam review will be provided after each exam. The date, time and place will be announced prior to the exam. Attendance is voluntary. Students will be provided a PAR Score Student Test Sheet during the in class review; you must write the question number and your rationale for your choice on the PAR Score student test report. There will be no verbal discussion of test questions during test review. Any pertinent questions regarding exam content must be made during an appointment that you can make with your instructor(s). The course faculty will review these comments and their decision will be final.

Written examinations will be given on dates noted on the course calendar. If a student cannot attend an examination, the course faculty must be notified before the examination is given. It is your responsibility and a requirement to notify the faculty in advance of any absence to retain the privilege of sitting for a make-up exam without grade penalty. Make-up examinations may include a variety of formats to include essay. Students requiring a make-up exam will report to DONAH or Student Testing Center at a designated time instructed by the faculty on the Friday following the missed exam. If the rescheduled opportunity is missed there will be no other opportunities afforded. VNSG 1429 follows the testing policy published in the Department of Nursing and Allied Health Student Handbook.

5. A student scoring 70% or less on any exam must make an appointment with the course faculty for exam review and counseling. (Appointments are optional for scores >70%). According to Department policy, individual appointments with the course faculty must be made by the student within one week of the test date for individual review of the exam. It is the student’s responsibility to make an appointment with the faculty if he/she did not achieve a minimum of 70% on an exam. The exam may be reviewed with the faculty at a later date but the appointment must be made within the one-week time frame. No exceptions. Once a subsequent exam has been administered, no prior exam may be reviewed.

6. The “Course & Testing Policy” fully explains the grading policy, exam dates and times, time limitations, review, challenge policy, and counseling. Please refer to last page of this syllabus.
VI. SEMESTER GRADE COMPUTATIONS

A. The course grade is determined by written examinations and participation. The participation points earned will be added at the end of the semester after completion of all exams and only if the student has a cumulative exam average of at least 70% (224 raw points). Students who do not have a cumulative exam average of at least 70% (224 raw points) after all exams will fail VNSG 1429.

Skills: The student will be given three opportunities to pass each skill check off. The student must pass 100% of all skills. Supervised remediation/practice will be required for the student not passing a skill check off. If a student is unsuccessful in a skill, it will be their responsibility to schedule a supervised practice and the next attempt of the skill within one (1) week. If the student misses the scheduled practice or check-off, it will be recorded as a “U” for that attempt. The student will fail the course if they are unsuccessful on any skill after three attempts.

Students are required to have a cumulative exam score of 70% (224 raw points out of 320) AND a total of at least 280 points in the course in order to be successful. It is possible that a student could achieve a cumulative exam score of 70% (224 raw points) and still be unsuccessful if the student does not earn enough participation points to bring total points up to 280. Students who do not have a total of at least 280 points at the end of the semester will fail VNSG 1429.

B. The requirements for determining course grades are:

1. Exam Points
   Exams-4- worth 60 points each 240 points
   Final Comprehensive Exam: 80 points

2. Assignments
   Group Presentation 20 points
   Skill Check Offs Pass/Fail

3. Participation Points
   Evolve HESI Med-Surg Practice Exam 60 points

Total points possible: 400 points

Evolve HESI Med-Surg Practice Exam: (60 points) This exam is located on the Evolve Site under HESI PN Case Studies with Practice Test, Summer 2018 Grad. Upon completion please submit electronically. (Please note: no credit will be given unless submissions are made prior to the Due date and a score of 70% is achieved out of two attempts).
Group Presentation: (20 points): Criteria for the presentation is posted on Blackboard. The presentation will last a minimum of 15 minutes and maximum of 20 minutes in length). During oral presentation it must be evident that all members have collaborated proportionately. A Peer Evaluation Form must be submitted through the Group Presentation Submission Link located on Blackboard. A separate grade will be submitted to the student(s) found not to have participated effectively.

A power point presentation is mandatory (criteria is posted under Group Presentation Requirements on Blackboard). In addition for the oral presentation you may utilize any of the following formats: handouts, skits, video, etc. Be creative with your information and allow time for questions at the end of the presentation.

The power point presentation must be submitted via Blackboard (Group Presentation Submission Link) the Sunday prior to the oral presentation date assigned. A minimum of 5 references (2 textbooks, 2 journal articles, and web document) should be included on your references slide.

C. The faculty reserves the right to adjust the student’s classroom grade based upon classroom performance/behavior/civility.

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR
A. Course Withdrawal: (Consistent with CTC policy)
B. Administrative Initiated Withdrawals: (Consistent with CTC policy)
C. Incomplete Grade: (Consistent with CTC policy).
D. Cellular Phones and Beepers: Cellular phones and beepers will be silenced or placed on vibrate during regular class and laboratory periods. Cell phones will not be allowed on desks during examinations. Personal belongings, such as backpacks, and purses, cellular phones, laptops will be secured in your personal vehicle during the exam. Once your exam and Scantron is turned in you then may retrieve your belongings and supplies needed for class. Repeated warnings about cell phone disruptions may lead to negative student academic consequences (i.e. point deductions from final grade). This will be left at the faculty’s discretion.
E. Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at www.ctcd.edu/disability-support for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.
F. **Instructor Discretion:** The instructor reserves the right of final decision in course requirements.

G. ** Civility:** Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

H. **Support Services:** The College offers a variety of support services to students. Refer to the CTC website: [www.ctcd.edu](http://www.ctcd.edu) and click on “Support Services” from the Main Menu.

I. **Non-Discrimination:** Central Texas College District is an equal opportunity, affirmative action institution. We are unequivocally committed to a policy of equal access and equal opportunity in employment practices, admissions, educational programs, and all other college activities. The college does not discriminate on the basis of race, color, religion, national origin, gender, age, disability, veteran status, genetic information, sexual orientation, gender identity or transgender status. Accordingly, it is the [policy of the college](http://www.ctcd.edu) to maintain an academic and work environment free of discrimination and harassment in accordance with all applicable federal, state and local statutes and regulations.

J. **Inclement Weather:** Information about class cancellation or delay because of inclement weather can be obtained by listening to KNCT-FM (91.3 on the FM dial) or by calling (254) 501-3100 (Central Texas College Inclement Weather Information Line).

K. **Progression:** A student must successfully complete VNSG 1301: Mental Health & Mental Illness, VNSG 1219: Leadership & Professional Development, VNSG 1560/2560: Clinical Practical Nurse II in order to progress to the next semester. If withdrawal occurs for any reason from any of the co-requisite courses, VNSG 1301, 1219, withdrawal from the corresponding clinical course, VNSG 1560/2560 Clinical Practical Nurse II is required.

VIII. **COURSE OUTLINE**

A. **Unit 1: Patient Care Concepts and Acute Care**

1. **Learning Outcomes:**
   a. Explain the difference between acute and chronic illness.
   b. Select nursing measures for health promotion, health maintenance, and illness.
   c. Identify the principles of emergency and first-aid care.
   d. Explain the legal implications of administering first aid in emergency situation.
   e. Identify the concepts of stress, anxiety, adaptation, and homeostasis.
   f. Identify some basic coping strategies.
   g. List the principles of emergency and first aid care.
   h. List the steps of the initial assessment and interventions of a person requiring emergency care.
   i. Describe the components of the nursing assessment of the person...
receiving emergency care.

j. Outline the steps of the nursing process for emergency or first aid treatment of victims of cardiac arrest, choking, shock, hemorrhage, trauma, burns, heat or cold exposure, poisoning, bites, and stings.

k. Discuss the roles of nurses and nursing students in relation to bioterrorism and natural disasters.

l. Explain the legal implications of administering first aid in emergent situations.

m. Explain the implications of the Good Samaritan Doctrine.

n. List the indications for IV fluid therapy.

o. Describe the types of fluids used for IV therapy.

p. Describe the types of access devices and other equipment used for IV therapy.

q. Demonstrate correct medication calculations for IV therapy.

r. Explain the causes, signs and symptoms, and nursing implications of the complications of IV fluid or drug therapy.

s. Explain the nursing responsibilities when a patient is receiving IV therapy.

t. Identify various IV medications that require dilution because they are vesicants or irritants.

u. List the developmental tasks for successful adulthood.

v. Identify the health problems specific to adult age groups.

w. Discuss the health care needs of young, middle and older adults.

x. Describe intra and extracellular fluid compartments.

y. Describe the composition of extracellular and intracellular body fluid compartments.

z. Discuss the mechanisms of fluid transport and fluid balance.

aa. Identify the causes and signs and symptoms and treatment of fluid imbalances.

bb. Describe the major functions of: sodium, potassium, calcium, magnesium, chloride.

cc. Identify the causes, s/s, and treatment of electrolyte imbalances.

dd. List data to be collected in assessing fluid and electrolyte status.

ee. Discuss the medical and nursing treatment for a patient with a electrolyte imbalance.

ff. Explain why older people are at increased risk for fluid and electrolyte imbalances.

gg. List four types of acid base imbalances.

hh. Identify major causes of each acid base imbalance.

ii. Explain the medical treatment and nursing management of acid base imbalance.

2. Learning Activities: group discussion, independent and group collaboration.
3. **Equipment and Materials:**
a. Lecture outline/PowerPoint and/or instructional hand-outs in Blackboard Learning Management System

4. **Audio-visual Aids:** DVD/VHS, CD, computer aided instruction (CAI) as appropriate

5. **Lesson Outline:**
a. Chapter 8: Health and Illness
b. Chapter 55: Psychologic Response to Illness
c. Chapter 16: First Aid, Emergency care and Disease Management
d. Chapter 18: Intravenous Therapy
e. Chapter 10: Developmental Process
f. Chapter 14: Fluid and Electrolytes

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**B. Unit 2: Surgical Care and Respiratory Disorders**

1. **Learning Outcomes:**
a. Compare the purposes of each type of surgery: diagnostic, ablative, palliative, reconstructive or restorative.
b. Identify the nursing diagnosis, goals and outcome criteria, and interventions during the preoperative and postoperative phase of the surgical experience.
c. Explain how the nurse can help prevent postoperative complications.
d. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with nose sinuses, and throat disorders.
e. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with chronic inflammatory, obstructive, and restrictive pulmonary diseases.
f. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with respiratory disorders.

2. **Learning Activities:** group discussion, independent and group collaboration.

3. **Equipment and Materials:**
a. Lecture outline/PowerPoint and/or instructional hand-outs in Blackboard Learning Management System

4. **Audio-visual Aids:** DVD/VHS, CD, computer aided instruction (CAI) as appropriate

5. **Lesson Outline:**
a. Chapter 17: Surgical Management
b. Chapter 30: Nose/Throat, Upper Respiratory Disorders
c. Chapter 31: Acute Disorders of the Lower Respiratory Tract
d. Chapter 32: Chronic Disorders of the Lower Respiratory Tract
C. **Unit 3: Pain Management, Integumentary Disorders and Cardiovascular Disorders**

1. **Learning Outcomes:**
   a. Explain the physiologic basis for pain.
   b. Explain the relationships between past pain experiences, anticipation, culture, anxiety, and a patient’s response to pain.
   c. Collect the data for assessing pain and document appropriately.
   d. Compare the nursing care for patient’s receiving opioid and nonopioid analgesics for pain.
   e. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patient’s skin disorders.
   f. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with cardiac disorders.
   g. Explain and compare nursing considerations for patients who are having procedures to detect or evaluate cardiac disorders.
   h. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with vascular disorders.
   i. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with hypertension.
   j. Identify nursing considerations for administering antihypertensive medications.

2. **Learning Activities:** group discussion, independent and group collaboration.

3. **Equipment and Materials:**
   a. Lecture outline/PowerPoint and/or instructional hand-outs in Blackboard Learning Management System

4. **Audio-visual Aids:** DVD/VHS, CD, computer aided instruction (CAI) as appropriate

5. **Lesson Outline:**
   a. Chapter 15: Pain Management
   b. Chapter 52: Skin Disorders
   c. Chapter 36: Cardio Disorders
   d. Chapter 37: Vascular Disorders
   e. Chapter 38: Hypertension (HTN)

D. **Unit 4: Musculoskeletal and Digestive Disorders**

1. **Learning Outcomes:**
   a. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with connective tissue disorders.
   b. Identify the five stages of the healing process.
   c. Explain the difference between hip fractures, Colles fractures, and pelvic fractures.
d. Describe the nursing care of patient with a fracture.
e. List the different types of amputations
f. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with amputations.
g. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with upper digestive tract disorders.
h. Assess, collect data, identify nursing responsibilities, and assist in development of nursing care plans for patients with lower digestive tract disorders.

2. **Learning Activities**: group discussion, independent and group collaboration.

3. **Equipment and Materials**:
   b. Lecture outline/PowerPoint and/or instructional hand-outs in Blackboard Learning Management System

4. **Audio-visual Aids**: DVD/VHS, CD, computer aided instruction (CAI) as appropriate

5. **Lesson Outline**:
   a. Chapter 43: Connective Tissue Disorders
   b. Chapter 44: Fractures
   c. Chapter 45: Amputations
   d. Chapter 39: Upper GI tract
   e. Chapter 40: Lower GI tract

**COMPREHENSIVE FINAL EXAM**

IX. **COURSE TEACHING LEARNING ACTIVITIES**

A. **Course Calendar**: The Course Calendar for VNSG 1429 details required reading for each of the units of study. The student is to use this syllabus in conjunction with the daily plan to prepare for class. (C 1, 3)

B. **Supplemental Learning Activities**: Students are highly advised to utilize the supplemental learning aids that accompany the required text in preparation for each lesson. Each assigned chapter in the required text has corresponding Chapter Review questions that should be completed. Student resources are available, these resources include NCLEX exam Review Question with rationales, interactive, animations, video clips, audio clips, and chapter summaries. The study guide that accompanies the required text is also available and it is recommended that students utilize it as an additional learning aid for this course. All of these resources are excellent learning aids and are highly recommended by the instructors of this course.
C. **Auto-Tutorial:** For some units of study, audio-visual materials and computer-assisted instruction are assigned. Videos will be viewed in class. Computer-assisted programs may be viewed in the learning laboratory. The student will be tested over material from videos or required computer-assisted programs. *(C 8, 18)*

D. **Self-Directed Study:** Each student enters the program with varied backgrounds, educational preparations and rate of learning; therefore, to enhance the teaching-learning process, the student is expected to develop an attitude of self-direction in acquiring knowledge. As part of the self-directed study the student is encouraged to complete Learning Outcomes at the beginning of each assigned chapter. This course is fast paced, with new material covered at each class meeting. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate professor, if further assistance is needed. *(F 11, 13, 16)*

E. **Class Presentation:** A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, audio visuals) will be utilized to present material on assigned units of study. Class presentations are intended to supplement assigned learning aids. It is the student’s responsibility to be familiar with assigned material before attending class. *(F 13)*

F. **Drug Information:** The student will be required to identify the classification, generic name, trade name, physiological action, uses, therapeutic range (if applicable), route of administration, principle side effects, contraindications, incompatibilities, patient teaching, nursing responsibilities, and evaluation of effectiveness of these drugs after being discussed in class. Also, the student must demonstrate basic mathematical skills necessary for practical problem solving for drug administration. *(F 3, 4)*
Central Texas College
Associate and Vocational Degree Nursing Program
Dosage Calculation for Administration (DCFA) Rounding Rules

These rules are standard rules of rounding that apply across the curriculum unless otherwise specified on an exam. All answers must be correctly labeled or they are wrong.

1. Never round off until the final answer.
2. When rounding, the general rule is: 5 and above round up, 4 and below round down. However, never round up when figuring problems for pediatrics/infants. Refer to the required dosage calculation text for specific examples.
3. Milligrams/dose- round to the tenths place. (Exception: see rule #9)
4. Milliliters/dose- round to the tenths place unless the amount is less than 1 ml, then round to the hundredths place.
5. Milliliters or ounces/feed- round to the tenths place.
6. Milliliters/hour- round to the tenths place.
7. Drops (gtts)/minute- round to the whole number.
8. Insulin should be given as ordered. DO NOT round off.
9. Digoxin and heparin should be rounded to the thousandths place (mg/dose only).
10. A zero “0” and a decimal point should precede amounts less than 1. Refer to the required dosage calculation text for specific examples.
11. No “trailing” zeros. Ex: 5 mL, not 5.0 mL; 0.4 mL, not 0.40 mL.
12. Micro-drip tubing has a drop factor of 60gtt/mL. Macro-drip tubing has a drop factor of 10, 15, or 20gtts/mL.
13. To convert pounds and ounces to pounds, divide the ounces by 16. For example: weight = 7 lb 10 oz, (10/16) = 0.625, so the weight is 7.625 lb.
14. *Conversions you must know:
   1 pound (lb) = 16 ounces (oz) 1 kilogram (kg) = 2.2 pounds (lb)
   1 kilogram (kg) = 1000 grams (g) 1 gram (g) = 1,000,000 micrograms (mcg)
   1 gram (g) = 1000 milligrams (mg) 1 milligram (mg) = 1000 micrograms (mcg)
   1 unit (U) = 1000 milliunits (mU) 1 liter (L) = 1000 milliliters (mL)
   1 ounce (oz) = 30 milliliters (mL) 1 teaspoon (tsp) = 5 milliliters (mL)
   1 tablespoon (Tbsp) = 15 milliliters (mL) 1 oz of breast milk = 20 kilocalories (kcal)
   1 oz of baby formula = 20 kcal unless otherwise specified in problem
My signature below confirms, I fully understand the information in the VNSG 1429 syllabus. My signature acknowledges receipt of, and understanding of, the VNSG 1429 Course & Testing policy and receipt of the VNSG 1429 Syllabus (posted on Blackboard).

Printed Name

Signature  Date