CENTRAL TEXAS COLLEGE
RNSG 1331
PRINCIPLES OF CLINICAL DECISION – MAKING

Semester Hours Credit: 3

INSTRUCTORS: _________________________________________________

OFFICE HOURS: _____________________________

I. INTRODUCTION

A. **Course Description:** Examination of selected principles related to the continued development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis on clinical decision making for clients in medical-surgical settings experiencing health problems involving fluid and electrolytes; perioperative care; pain; respiratory disorders; peripheral vascular disorders; immunologic disorders; and infectious disorders. Discussion of knowledge, judgment, skills, and professional values within a legal/ethical framework. This course lends itself to either a blocked or integrated approach. **End-of-Course Outcomes:** Utilize critical thinking and a systematic problem-solving process as a framework for providing nursing care for patients and families in structured health care settings experiencing health problems involving fluid and electrolytes; perioperative care; pain; respiratory disorders; peripheral vascular disorders; immunologic disorders; and infectious disorders; and explain the roles of the professional nurse in the provision of patient-focused care.

B. Required course.

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

D. Prerequisites:
   1. RNSG 1413 – Foundations of Nursing
   2. RNSG 1115 - Health Assessment
   3. RNSG 1262 – Clinical Nursing I
   4. HPRS 2300 – Pharmacology for Health professionals
   5. ENGL 1301 – Composition
   6. BIOL 2401 – Anatomy and Physiology I
   7. BIOL 2402 – Anatomy and Physiology II
   8. BIOL 2420 – Microbiology for Non-science Majors

E. Corequisites:
   1. RNSG 1363 – Clinical Nursing II
   2. RNSG 2213 – Mental Health Nursing
   3. PSYC 2301 – General Psychology
F. 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 RNSG 1331 are also alphanumeric coded as Member of a Profession (MOP), Provider of Patient-Centered Care (PPCC), Patient Safety Advocate (PSA), and Member of the Health Care Team (MHCT).

II. LEARNING OUTCOMES

Upon successful completion of this course, (Principles of Clinical Decision Making), the student will:

A. Utilize critical thinking and a systematic problem-solving process as a framework for providing nursing care for patients and families in structured health care settings experiencing health problems involving fluid and electrolytes; perioperative care; pain; respiratory disorders; peripheral vascular disorders; immunologic disorders; and infectious disorders within the community. (F 7, 8, 9) (PPCC-ABC) (MOP-ABC)

B. Explain the roles of the professional nurse in the provision of patient-focused care. (F7-9, F12) (MOP-ACD) (MHCT-BC)

C. Describe principles of health promotion utilized in preventing common health care problems. (POC-5, 7) (PSA-C)

D. Describe the use of therapeutic communication techniques to maintain effective interpersonal relationships. (C 7, 12) (PPCC-B) (MHCT-ACDE)

E. Describe caring, ethical, and legal issues in providing nursing care for the client experiencing common health problems. (F 15, 17) (MOP-ABC) (PPCC-E)

F. Using the nursing process, identify the following for clients in structured health care settings experiencing health problems involving fluid and electrolytes; perioperative care; pain; respiratory disorders; peripheral vascular disorders; immunologic disorders; and infectious disorders within the community: 1) dietary modifications, 2) psychosocial stressors, 3) learning needs to formulate a teaching plan for a client/family to promote health maintenance/health restoration, 4) gerontological considerations, and 5) multicultural considerations. (C 10) (PPCC-A-H) (PSA- C) (MHCT-A-E)

G. Acknowledge and demonstrate patient quality and safety as it relates to all practices of patient care. (C 1-12, 14-20, F-1&2, 4-17) (MOP-C) (PPCC- 1-8) (PSA-1-4) (MHCT-ABCDEFG)

H. 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, 11, 14, 15; F15, 16, 17) (MOP ABC; PPCC-B; MHCT-D).

III. INSTRUCTIONAL MATERIALS

A. The instructional materials identified for this course are viewable through www.ctcd.edu/books.

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 Nursing courses (RNSG 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 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 plugins. 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. 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 RNSG 1331. 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, Evidenced-Based Practice, Quality Improvement, Safety, and Informatics.

IV. COURSE REQUIREMENTS

A. Preparation for Class: In preparation for any unit of study, the student must read the course objectives and assigned required readings. Students will be expected to orally participate in a variety of critical thinking exercises and classroom discussions. **You may not audiotape/videotape a lecture without the faculty's permission. Copyrighted materials may not be audio taped/videotaped.**

B. Attendance Policy: RNSG 1331 adheres to the department attendance policy published in the nursing department student handbook. Also, refer to the college catalog. If absences occur, it is each student's responsibility to obtain classroom materials from peers.

C. Scholastic Honesty: Plagiarism, collusion, and cheating will be handled according to college policy (refer to College Catalog).

D. Office Hours: Each faculty member/instructor keeps office hours for the purpose of conferring with students. Students are encouraged to make appointments with a faculty member/instructor to discuss their needs and/or problems related to RNSG 1331. Please use the phone at reception desk to call the faculty member's/instructor's office before your appointment.

V. EXAMINATIONS

Five examinations will be given in Principles of Clinical Decision Making, this includes a comprehensive final. There will be reviews for each examination prior to the test date. Taping of these reviews is not allowed, unless it’s okay by the instructors. Attendance at
Examinations: Written examinations will be given on dates noted on the daily plan. If a student cannot attend an examination, the course faculty must be notified before the examination is given, with a legitimate reason. A make-up examination will be given upon verification of reason for absence. Students requiring a make-up exam will report to the department of Nursing at 9 am on the Friday following the missed exam.

VI. SEMESTER GRADE COMPUTATIONS

A. The course grade is determined by written examinations. There will be multiple participation assignments. The assignments can be any of the following combinations: med cards, a term paper, VCE assignments, a discussion board, in-class projects, participation in a professional nursing meeting such as the SNA. The assignments will vary on the instructors’ identification of student needs. These points will not be averaged into the student’s grade until all exams have been passed with an average of 75% or greater. The first four exams will be worth 75 points; the final will be worth 80 points. There is a total of 20 participation points.

PLEASE NOTE: Failure to make the required 850 on the HESI (Health Assessment) will require that the student do 2 (two) hours of online remediation. If a student fails to perform the required remediation, they will have 2 (two) of their participation points deducted. Remediation is to help the student better understand the questions and content of the HESI Exam.

B. Due to the CTC class schedule 2 hours will be the maximum limit for the completion of the exam I, II, III and IV. A maximum of 2 hours will also be allotted to complete the final exam. Test review for each exam will be determined by faculty. Grades will be available within one week following the exam.

C. If you find the need to challenge a test question, you may do so in the following way: You may identify it by writing the question number and your validation for challenging it on the back of your exam and present your challenge with validation to your instructor. All challenges must be submitted in writing with validation supporting more than one answer.

• The RNSG 1331 team will review each question challenged and make a final decision to approve or dismiss the challenge prior to any subsequent exam.
• Once a subsequent exam has been administered, no prior exam may be reviewed or any prior test question challenged.

D. The student must achieve a “C” or better to pass this course

E. The final grade for the course will be computed as follows:

**Points**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>360 – 400 points</td>
</tr>
<tr>
<td>B</td>
<td>320 – 359.99 points</td>
</tr>
<tr>
<td>C</td>
<td>300 – 319.99 points</td>
</tr>
<tr>
<td>D</td>
<td>240 – 299.99 points</td>
</tr>
<tr>
<td>F</td>
<td>239.9 points or less</td>
</tr>
</tbody>
</table>

There is no rounding of the final theory average.
The student must earn a 75% or better on the cumulative exam average to pass RNSG 1331. 75% equals 285 exam points. The participations points will then be added in. Failure of the student to complete all of the participation points can result in failure of the course. For example: the student earns 285 points on all four tests plus the final – only completing 10 participation points will give the student 295 points. This is a “D” and the student will not be eligible to advance to the next semester. It is also considered a course failure.

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

**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 RNSG 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: RNSG 1413 (Foundations Exam), RNSG 1229 (Foundations Exam), RNSG 1331 (Health Assessment Exam), RNSG 1347 (Pharmacology Exam), and RNSG 2213 (Mental Health Exam). These exams will count toward the course participation grade.

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 4:** The RN Exit exam will be given during semester four in RNSG 2331. The exam will be administered and completed on the scheduled dates. Two attempts will be required for completion of the RN Exit exams. The RN 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 RN Exit Exams (two) are mandatory for all fourth semester students. If the recommended score of 850 is not obtained on RN Exit 1, mandatory self-remediation is required PRIOR to taking the next scheduled exam. A counseling session must be held with a faculty facilitator and remediation must be documented. Counseling and remediation is 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.

Again, written examinations will be given on dates noted on the daily plan. If a student cannot attend an examination, the course coordinator/professor must be notified at their office number (254) 526-1301 before the examination is given. It is your responsibility and a requirement to notify the professor in advance of any absence to retain the privilege of submitting make-up work without grade penalty. Make-up examinations may include a variety of formats. Students requiring a make-up exam will report to the Department of Nursing at 9 am on the Friday following the missed exam. If the rescheduled opportunity is missed there will be no other opportunities afforded. RNSG 1331 follows the testing policy published in the Department of Nursing Student Handbook.

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM THE INSTRUCTOR

A. Course Withdrawal: It is the student’s responsibility to officially withdraw from a course if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at any time prior to Friday of the 12th week of classes during the 16-week courses. Refer to the most current college catalog for the deadline for sessions of other length.

A student who officially withdraws will be awarded the grade of “W” provided the student’s attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the College before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of “F” or “FN” for nonattendance.

B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.

C. Incomplete Grade: The College catalog states, “An “IP” grade may be assigned by an instructor if a student has made satisfactory progress in a course with the exception of a major quiz, final exam, or other project. The “IP” grade may also be assigned for extenuating circumstances beyond a student’s control such as of distance learning courses, technology failures and mail delays. Notice of absences with supporting documentation may be required by the instructor. Students should notify instructors in advance of absences whenever possible. The instructor makes the final decision concerning the granting of the incomplete grade. The instructor may set a deadline for completing the remaining course requirements. In no case will the deadline exceed 120 days after the scheduled end of the course. It is the student’s responsibility to arrange with the instructor for the assignment of work necessary to complete the course and to change the
“IP” within the time specified. An “IP” grade cannot be replaced by the grade of “W.” If a student elects to repeat the course, the student must register, pay full tuition and fees and repeat the entire course. The IP grade became effective in the fall of 2001.

At the end of the 120 days if the student has not completed the remaining coursework as required by the instructor, the “IP” will be converted to an “FI” and appear as a “F” on the student’s official transcript.

Special conditions may apply to students enrolled in courses paid through financial aid, scholarships and VA benefits; military tuition assistance; or other third-party contractual agreements.

D. **Cellular Phones and Beepers:** Cellular phones and beepers will be turned off while the student is in the classroom or laboratory.

E. **American’s With Disabilities Act (ADA):**
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 [http://www.ctcd.edu/disability-support](http://www.ctcd.edu/disability-support). 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 CTC website: [www.ctcd.edu](http://www.ctcd.edu) and click on “Support Services” from the Main Menu.

I. **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).

J. **Non-Discrimination:** Central Texas College does not discriminate in admissions or access to, or treatment or employment in, its programs and activities on the basis of race, color, religion, national origin, gender, disability, age, veteran’s status, genetic information, sexual orientation or gender identity.

K. **Progression:** A student must successfully complete RNSG 1331, RNSG 2213, and RNSG 1363 in order to progress to the third semester. If withdrawal occurs for any reason from any of the co-requisite courses, RNSG 1331 or RNSG 2213, withdrawal from the corresponding clinical course, RNSG 1363 Nursing Clinical II is required.

If a student has a previous RNSG course failure, the student will be allowed to register for only one RNSG course during each summer session. Exceptions to
this policy will be made on an individual basis by the Admissions & Standards Committee recommendations.

VIII. COURSE OUTLINE

A. **Module One:** Perioperative Nursing Care

1. **Preoperative**
   
   **Learning Outcomes:** Upon successful completion of this lesson, the student will:
   
   a. Differentiate the common purposes and settings of surgery.
   b. Apply knowledge of the purpose and components of a preoperative nursing assessment.
   c. Interpret the significance of data related to the preoperative patient’s health status and operative risk.
   d. Analyze the components and purpose of informed consent for surgery.
   e. Examine the nursing role in the physical, psychologic, and educational preparation of the surgical patient.
   f. Prioritize the nursing responsibilities related to day-of-surgery preparation for the surgical patient.
   g. Differentiate the purposes and types of common preoperative medications.
   h. Apply knowledge of the special considerations of preoperative preparation for the older adult surgical patient.

2. **Intraoperative**
   
   **Learning Outcomes:** Upon successful completion of this lesson, the student will:
   
   a. Differentiate the purposes of the various areas of the perioperative/surgery department and the proper attire for each area.
   b. Differentiate among the roles and responsibilities of the interdisciplinary surgical team.
   c. Prioritize needs of patients undergoing surgical procedures.
   d. Analyze the role of the perioperative nurse in the management of the patient undergoing surgery.
   e. Apply basic principles of aseptic technique used in the operating room.
   f. Evaluate the importance of safety in the operating room relative to patients, equipment, and anesthesia.
   g. Differentiate the common types of and delivery systems for anesthesia.

3. **Postoperative**
   
   **Learning Outcomes:** Upon successful completion of this lesson, the student will:
   
   a. Prioritize nursing responsibilities in admitting patients to the post-anesthesia care unit (PACU).
b. Prioritize nursing responsibilities in the prevention of postoperative complications of patients in the PACU.

c. Apply data from the initial nursing assessment to the management of the patient after transfer from the PACU to the general care unit.

d. Explain the etiology and nursing assessment and management of potential problems during the postoperative period.

e. Differentiate discharge criteria from Phase I and Phase II post-anesthesia care.

B. **Module Two:** Care of Clients with Fluid & Electrolyte Imbalance

**Learning Outcomes:** Upon successful completion of this lesson, the student will:

a. Describe the composition of the major body fluid compartments.

b. Define the following processes involved in the regulation of movement of water and electrolytes between the body fluid compartments: diffusion, osmosis, filtration, hydrostatic pressure, oncotic pressure, and osmotic pressure.

c. Describe the etiology, laboratory diagnostic findings, clinical manifestations, and nursing and collaborative management of the following disorders:
   1. Extracellular fluid volume imbalances: fluid volume deficit and fluid volume excess
   2. Sodium imbalances: hypernatremia and hyponatremia
   3. Potassium imbalances: hyperkalemia and hypokalemia
   4. Magnesium imbalances: hypermagnesemia and hypomagnesemia
   5. Calcium imbalances: hypercalcemia and hypocalcemia
   6. Phosphate imbalances: hyperphosphatemia and hypophosphatemia

d. Identify the processes to maintain acid-base balance.

e. Discuss the etiology, laboratory diagnostic findings, clinical manifestations, and nursing and collaborative management of the following acid-base imbalances: metabolic acidosis, metabolic alkalosis, respiratory acidosis, and respiratory alkalosis.

f. Describe the composition and indications of common intravenous fluid solutions.

g. Discuss types and nursing management of commonly used central venous access devices.

C. **Module Three:** Care of Clients with Acute and Chronic Pain

**Learning Outcomes:** Upon successful completion of this lesson, the student will:

a. Define pain.

b. Describe the neural mechanisms of pain and pain modulation.

c. Differentiate between nociceptive and neuropathic types of pain.

d. Explain the physical and psychologic effects of unrelieved pain.

e. Interpret the subjective and objective data that are obtained from a comprehensive pain assessment.

f. Describe effective multidisciplinary pain management techniques.

g. Describe drug and nondrug methods of pain relief.

h. Explain your role and responsibility in pain management.
i. Discuss ethical and legal issues related to pain and pain management.

j. Evaluate the influence of one’s own knowledge, beliefs, and attitudes about pain assessment and management.

**Learning Activities:**

a. **Learning Guide:** The Learning Guide for RNSG 1331 includes objectives and learning activities for each of the units of study. The student is to use this learning guide in conjunction with the daily plan to prepare for class. **(C 1, 3)**

b. **Auto-Tutorial:** For some units of study, audio-visual materials and computer-assisted instruction are assigned. Some videos will be viewed in class. Computer-assisted programs may be viewed in the learning laboratory. The student may be tested over material from videos or required computer-assisted programs. **(C 8, 18)**

c. **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. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty member, if further assistance is needed. **(F 11, 13, 16)**

d. **Class Presentation:** A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, and 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 coming to class. **(F 13)**

e. **Drug Information:** Drugs pertaining to the units of study are listed in writing in the learning guide. The student will be required to identify generic name, trade name, action, usual dosage range, therapeutic effect, toxic effects, side effects, contraindications, essential nursing assessments, and essential client teaching of these drugs after the unit has been discussed in class. Also, the student **must** demonstrate basic mathematical skills necessary for practical problem solving for drug administration. **(F 3, 4)**

**Equipment and Materials: (if applicable)**

**List equipment or materials needed to conduct the lesson.**

1. Instructor-prepared handouts
2. Computer
3. Projector

**Audio-Visual Aids:**

a. Examples of equipment discussed in lecture for hands on examination.

b. You tube videos

c. Fluid and electrolyte CD
d. Powerpoints
e. MEDCOM Trainex Videos available on the CTC Library website

Lesson Outline:

a. homeostasis, diffusion and osmosis
b. fluid balance and Fluid imbalances
c. electrolyte balance & imbalances
d. Respiratory acidosis and alkalosis
e. Metabolic acidosis and alkalosis
f. ABG interpretation
g. IV fluids and IV care
h. purposes of surgery, surgical settings, and patient centered collaborative care
i. Members of the surgical team, preparation of the surgical suite & team safety, anesthesia, and patient-centered collaborative care
j. Post-op care protocols, role of the post-op nurse, patient-centered collaborative care
k. definition of pain, scope of pain issues, categorizing pain, theoretical bases for pain, and Patient-centered collaborative care

D. Module Four: Care of Clients with Respiratory Disorders

Lesson 1 – Respiratory System

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Differentiate among the structures and functions of the upper respiratory tract, the lower respiratory tract, and the chest wall.
b. Describe the process that initiates and controls inspiration and expiration.
c. Describe the process of gas diffusion within the lungs.
d. Identify the respiratory defense mechanisms.
e. Describe the significance of arterial blood gas values and the oxyhemoglobin dissociation curve in relation to respiratory function.
f. Relate the signs and symptoms of inadequate oxygenation to implications of these findings.
g. Relate the age-related changes of the respiratory system to the differences in assessment findings.
h. Select the significant subjective and objective data related to the respiratory system that should be obtained from a patient.
i. Select appropriate techniques to use in the physical assessment of the respiratory system.
j. Differentiate normal from common abnormal findings in a physical assessment of the respiratory system.
k. Describe the purpose, significance of results, and nursing responsibilities related to diagnostic studies of the respiratory system.

Lesson 2 – Nursing care of patients with Upper Respiratory Disorders

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Describe the clinical manifestations and nursing management of problems of the nose.
b. Describe the clinical manifestations and nursing management of problems of the paranasal sinuses.

c. Describe the clinical manifestations and nursing management of problems of the pharynx and larynx.

d. Discuss the nursing management of the patient who requires a tracheostomy.

e. Identify the steps involved in performing tracheostomy care and suctioning an airway.

f. Describe the risk factors and warning symptoms associated with head and neck cancer.

g. Discuss the nursing management of the patient with a laryngectomy.

h. Describe the methods used in voice restoration for the patient with temporary or permanent loss of speech.

Lesson 3 – Nursing care of patients with Lower Respiratory Disorders

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Differentiate among the types, pathophysiology, clinical manifestations, and collaborative care of pneumonia.

b. Prioritize the nursing management of the patient with pneumonia.

c. Describe the pathogenesis, classification, clinical manifestations, complications, diagnostic abnormalities, and nursing and collaborative management of tuberculosis.

d. Describe the causes, clinical manifestations, and nursing and collaborative management of pulmonary fungal infections.

e. Explain the pathophysiology, clinical manifestations, and nursing and collaborative management of lung abscesses.

f. Identify the causative factors, clinical features, and management of environmental lung diseases.

g. Describe the causes, risk factors, pathogenesis, clinical manifestations, and nursing and collaborative management of lung cancer.

h. Compare the pathophysiology and clinical manifestations of pneumothorax, fractured ribs, and flail chest.

i. Describe the purpose, methods, and nursing responsibilities related to chest tubes.

j. Explain the types of chest surgery and appropriate preoperative and postoperative care.

k. Compare and contrast extrapulmonary and intrapulmonary restrictive lung disorders in terms of causes, clinical manifestations, and collaborative management.

l. Describe the pathophysiology, clinical manifestations, and management of pulmonary embolism, pulmonary hypertension, and cor pulmonale.

m. Discuss the use of lung transplantation as a treatment for pulmonary disorders.

Lesson 4 – Nursing care of patients with Obstructive Pulmonary Disease

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Differentiate among the types, pathophysiology, clinical manifestations, and collaborative care of pneumonia.
Lesson 5 – Nursing care of patients with respiratory failure & ARDS

**Learning Outcomes:** Upon successful completion of this lesson, the student will:

a. Compare the pathophysiologic mechanisms and clinical manifestations that result in hypoxemic and hypercapnic respiratory failure.

b. Differentiate between the nursing and collaborative management of the patient with hypoxemic or hypercapnic respiratory failure.

c. Relate the pathophysiologic mechanisms that result in acute lung injury and acute respiratory distress syndrome (ARDS) to the clinical manifestations.

d. Select appropriate nursing and collaborative management strategies for the patient with ARDS.

e. Prioritize measures to prevent or reverse complications that may result from acute respiratory failure or ARDS.

**Learning Activities:**

a. **Learning Guide:** The Learning Guide for RNSG 1331 includes objectives and learning activities for each of the units of study. The student is to use this learning guide in conjunction with the daily plan to prepare for class.

b. **Auto-Tutorial:** For some units of study, audio-visual materials and computer-assisted instruction are assigned. Some videos will be viewed in class. Computer-assisted programs may be viewed in the learning
laboratory. The student may be tested over material from videos or required computer-assisted programs. (C 8, 18)

c. 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. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty member, if further assistance is needed. (F 11, 13, 16)

d. Class Presentation: A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, and 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 coming to class. (F 13)

e. Drug Information: Drugs pertaining to the units of study are listed in writing in the learning guide. The student will be required to identify generic name, trade name, action, usual dosage range, therapeutic effect, toxic effects, side effects, contraindications, essential nursing assessments, and essential client teaching of these drugs after the unit has been discussed in class. Also, the student must demonstrate basic mathematical skills necessary for practical problem solving for drug administration. (F 3, 4)

Equipment and Materials: (if applicable)
List equipment or materials needed to conduct the lesson.
1. Instructor-prepared handouts
2. Computer
3. Projector
4. Case studies

Audio-Visual Aids:
1. Examples of equipment discussed in lecture for hands on examination.
2. You tube videos
3. Powerpoints
4. MEDCOM Trainex Videos available on the CTC Library website

Lesson Outline:

a. Anatomy & physiology review, assessment methods and respiratory changes associated with aging

b. Focus is on disorders of the nose, sinuses, oral, pharynx, larynx, and tonsils; and nursing interventions in upper airway disorders. Content covered includes rhinitis, sinusitis, pharyngitis, tonsillitis, peritonsillar abscess, laryngitis, influenza, obstructions, laryngeal polyp, head & neck cancer, and tracheostomy care and assessment.

c. Focus on the following disorders: Bronchitis, pertussis, pneumonia, tuberculosis, atypical mycobacteria, pulmonary fungal infections, lung
abscess, environmental lung disease, lung cancer, pleural effusion, pleurisy, mesothelioma & lung transplant, atelectasis and idiopathic pulmonary fibrosis, sarcoidosis. Vascular lung diseases including: pulmonary edema, Pulmonary embolism, pulmonary hypertension primary and secondary), Cor Pulmonale, Chest traumas including: Rib fractures, flail chest, pneumothorax, tension pneumothorax and hemothorax. Chest tube management and care
d. Focus on the following disorders: Asthma, COPD, cystic fibrosis, bronchiectasis. Content covered includes: Etiology and pathophysiology, complication, classifications, manifestations, diagnostic testing, collaborative care, drug therapy and nursing care and management using the nursing process
e. Diseases covered: Respiratory failure (acute hypoxemic and hypercapnic) and ARDS. Etiology and pathophysiology, complication, manifestations, diagnostic testing, collaborative care, drug therapy, respiratory therapy gerontologic considerations and nursing care and management using the nursing process

E. **Module Five:** Care of Clients with Immunologic Disorders

**Lesson 1 – Nursing Care of Patients with altered immune systems**

**Learning Outcomes:** Upon successful completion of this lesson, the student will:

a. Define common terms related to genetics and genetic disorders: autosome, carrier, heterozygous, homozygous, mutation, recessive, and sex-linked.
b. Compare and contrast the most common classifications of genetic disorders.
c. Describe the functions and components of the immune system.
d. Compare and contrast humoral and cell-mediated immunity regarding lymphocytes involved, types of reactions, and effects on antigens.
e. Characterize the five types of immunoglobulins.
f. Differentiate among the four types of hypersensitivity reactions in terms of immunologic mechanisms and resulting alterations.
g. Identify the clinical manifestations and emergency management of a systemic anaphylactic reaction.
h. Describe the assessment and collaborative care of a patient with chronic allergies.
i. Explain the relationship between the human leukocyte antigen system and certain diseases.
j. Describe the etiologic factors, clinical manifestations, and treatment modalities of autoimmune diseases.
k. Describe the etiologic factors and categories of immunodeficiency disorders.
l. Differentiate among the types of rejections following transplantation.
m. Identify the types and side effects of immunosuppressive therapy.
Lesson 2 – Nursing care of patients with inflammatory disorders

Learning Objectives: Upon successful completion of this lesson, the student will:

a. Describe the inflammatory response, including vascular and cellular responses and exudate formation.
b. Explain local and systemic manifestations of inflammation and their physiologic basis.
c. Describe the drug therapy, nutrition therapy, and nursing management of inflammation.
d. Differentiate among healing by primary, secondary, and tertiary intention.
e. Describe the factors that delay wound healing and common complications of wound healing.
f. Describe the nursing and collaborative management of wound healing.
g. Explain the etiology and clinical manifestations of pressure ulcers.
h. Apply a patient risk assessment for pressure ulcers to measures used to prevent the development of pressure ulcers.
i. Discuss nursing and collaborative management of a patient with pressure ulcers.

Lesson 3 – Nursing care of patients with myasthenia gravis and guillian-barre syndromes

Learning Objectives: Upon successful completion of this lesson, the student will:

a. Differentiate the etiology, clinical manifestations, diagnostic studies, collaborative care, and nursing management of Myasthenia Gravis and Guillain-Barre
b. Explain the potential impact of chronic neurologic disease on physical and psychological well-being.
c. Outline the major goals of treatment for the patient with a chronic, progressive neurologic disease

Lesson 4 – nursing care of patients with arthritic disorders

Learning Objectives: Upon successful completion of this lesson, the student will:

a. Compare and contrast the sequence of events leading to joint destruction in osteoarthritis and rheumatoid arthritis.
b. Detail the clinical manifestations, collaborative care, and nursing management of osteoarthritis and rheumatoid arthritis.
c. Summarize the pathophysiology, clinical manifestations, collaborative care, and nursing management of ankylosing spondylitis, psoriatic arthritis, and reactive arthritis.
d. Describe the pathophysiology, clinical manifestations, and collaborative care of septic arthritis, Lyme disease, and gout.
e. Differentiate the pathophysiology, clinical manifestations, collaborative care, and nursing management of systemic lupus erythematosus, polymyositis, dermatomyositis, and Sjögren’s syndrome.
f. Explain the drug therapy and related nursing management associated with arthritis and connective tissue diseases.
g. Compare and contrast the possible etiologies, clinical manifestations, and collaborative and nursing management of myofascial pain syndrome, fibromyalgia syndrome, and chronic fatigue syndrome

**Learning Activities:**

a. **Learning Guide:** The Learning Guide for RNSG 1331 includes objectives and learning activities for each of the units of study. The student is to use this learning guide in conjunction with the daily plan to prepare for class. 
   
   *(C 1, 3)*

b. **Auto-Tutorial:** For some units of study, audio-visual materials and computer-assisted instruction are assigned. Some videos will be viewed in class. Computer-assisted programs may be viewed in the learning laboratory. The student may be tested over material from videos or required computer-assisted programs. 
   
   *(C 8, 18)*

c. **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. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty member, if further assistance is needed. 
   
   *(F 11, 13, 16)*

d. **Class Presentation:** A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, and 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 coming to class. 
   
   *(F 13)*

e. **Drug Information:** Drugs pertaining to the units of study are listed in writing in the learning guide. The student will be required to identify generic name, trade name, action, usual dosage range, therapeutic effect, toxic effects, side effects, contraindications, essential nursing assessments, and essential client teaching of these drugs after the unit has been discussed in class. Also, the student must demonstrate basic mathematical skills necessary for practical problem solving for drug administration. 
   
   *(F 3, 4)*

**Equipment and Materials:** (if applicable)

**List equipment or materials needed to conduct the lesson.**

1. Instructor-prepared handouts
2. Computer
3. Projector

**Audio-Visual Aids:**

1. You tube videos
2. Powerpoints
3. MEDCOM Trainex Videos available on the CTC Library website
Lesson Outline:

a. Normal immune response, types of immunity, effects of aging, altered immune response, hypersensitivity reactions, allergic disorders, autoimmune disorders, immunodeficiency disorders and organ transplant. Overview of the infectious process, health promotion & maintenance, CDC guidelines, multidrug-resistant organisms & infections, occupational exposure and patient centered collaborative care

b. Inflammatory response (vascular, chemical and cellular), Wounds and wound care, delay and complications in healing and pressure ulcers. Content covered includes: Etiology and pathophysiology, staging, complications, prevention and treatment. Patient teaching, collaborative care, nutritional support, gerontologic considerations and nursing care and management using the nursing process

c. Etiology and pathophysiology, complication, clinical manifestations, diagnostic testing, collaborative care, drug therapy and nursing care and management using the nursing process

d. Osteoarthritis, rheumatoid arthritis, spondyloarthopathies, akylosing spondylitis, psoriatic arthritis, septic arthritis, Systemic lupus erythematosus, systemic sclerosis, scleroderma, fibromyalgia, chronic fatigue syndrome, gout, lyme disease, sjogren’s and felty’s syndrome

F. Module Six: Care of Clients with Infectious Disorders

Lesson 1 – Care of patients with HIV

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Evaluate the impact of emerging and reemerging infections on health care.
b. Select ways that you can decrease the development of resistance to antibiotics.
c. Explain the ways human immunodeficiency virus (HIV) is transmitted and the factors that affect transmission.
d. Describe the pathophysiology of HIV infection.
e. Depict HIV disease progression in the spectrum of untreated infection.
f. Identify the diagnostic criteria for acquired immunodeficiency syndrome (AIDS).
g. Explain methods of testing for HIV infection.
h. Discuss the collaborative management of HIV infection.
i. Summarize the characteristics of opportunistic diseases associated with AIDS.
j. Describe the long-term consequences of HIV infection and/or treatment of HIV infection.
k. Compare and contrast the methods of HIV prevention that eliminate risk and those that decrease risk.
l. Describe the nursing management of HIV-infected patients and HIV-at-risk patients.
Lesson 2 – Care of patients with Hepatitis and cirrhosis

Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Define jaundice and describe signs and symptoms that may occur with the different types of jaundice.

b. Differentiate among the types of viral hepatitis, including etiology, pathophysiology, clinical manifestations, complications, and collaborative care.

c. Describe the nursing management of the patient with viral hepatitis.

d. Explain the etiology, pathophysiology, clinical manifestations, complications, collaborative care, and nursing management of the patient with cirrhosis of the liver.

Learning Activities:

a. Learning Guide: The Learning Guide for RNSG 1331 includes objectives and learning activities for each of the units of study. The student is to use this learning guide in conjunction with the daily plan to prepare for class. (C 1, 3)

b. Auto-Tutorial: For some units of study, audio-visual materials and computer-assisted instruction are assigned. Some videos will be viewed in class. Computer-assisted programs may be viewed in the learning laboratory. The student may be tested over material from videos or required computer-assisted programs. (C 8, 18)

c. 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. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty member, if further assistance is needed. (F 11, 13, 16)

d. Class Presentation: A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, and 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 coming to class. (F 13)

e. Drug Information: Drugs pertaining to the units of study are listed in writing in the learning guide. The student will be required to identify generic name, trade name, action, usual dosage range, therapeutic effect, toxic effects, side effects, contraindications, essential nursing assessments, and essential client teaching of these drugs after the unit has been discussed in class. Also, the student must demonstrate basic mathematical skills necessary for practical problem solving for drug administration. (F 3, 4)
Equipment and Materials: (if applicable)
List equipment or materials needed to conduct the lesson.
1. Instructor-prepared handouts
2. Computer
3. Projector

Audio-Visual Aids:
1. You tube videos
2. Powerpoints
3. MEDCOM Trainex Videos available on the CTC Library website

Lesson Outline:

a. Definitions, Principles of infection control and HIV to include: statistics, pathophysiology, transmission, clinical manifestations and complications, diagnostic testing, collaborative care, drug therapy (antivirals and antiretrovirals), health promotion and prevention, testing and counseling, ongoing care, end of life care, cultural considerations, HIPPA, therapeutic communication and nursing care and management using the nursing process

G. Module Seven: Care of Clients with Peripheral Vascular Disorders

Lesson 1 - Nursing care of patients with hypertension
Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Relate the pathophysiologic mechanisms associated with primary hypertension to the clinical manifestations and complications.
b. Select appropriate strategies for the prevention of primary hypertension.
c. Describe the collaborative care for primary hypertension, including drug therapy and lifestyle modifications.
d. Explain the collaborative care of the older adult with primary hypertension.
e. Prioritize the nursing management of the patient with primary hypertension.
f. Describe the collaborative care of a patient with hypertensive crisis

Lesson 2 – introduction to care of patients with coronary artery disease
Learning Outcomes: Upon successful completion of this lesson, the student will:

a. Relate the etiology and pathophysiology of coronary artery disease, angina, and acute coronary syndrome to the clinical manifestations of each disorder.
b. Describe the nursing role in the promotion of therapeutic lifestyle changes in patients at risk for coronary artery disease.
c. Differentiate the precipitating factors, clinical manifestations, and collaborative care and nursing management of the patient with coronary artery disease and chronic stable angina.

d. Explain the clinical manifestations, complications, diagnostic study results, and collaborative care of the patient with acute coronary syndrome.

e. Evaluate commonly used drug therapy in treating patients with coronary artery disease and acute coronary syndrome.

f. Prioritize key components to include in the rehabilitation of patients recovering from acute coronary syndrome and coronary revascularization procedures

Lesson 3 – Care of patients with vascular disorders

**Learning Outcomes:** Upon successful completion of this lesson, Students will:

a. Relate the major risk factors to the etiology and pathophysiology of peripheral artery disease.

b. Differentiate the pathophysiology, clinical manifestations, and collaborative care of different types of aortic aneurysms.

c. Select appropriate nursing interventions for a patient undergoing an aortic aneurysm repair.

d. Describe the pathophysiology, clinical manifestations, collaborative care, and nursing management of aortic dissection.

e. Describe the clinical manifestations, collaborative care, surgical management, and nursing management of peripheral artery disease of the lower extremities.

f. Plan appropriate nursing care for the patient with acute arterial ischemic disorders of the lower extremities.

g. Differentiate the pathophysiology, clinical manifestations, collaborative care, and nursing management of thromboangiitis obliterans (Buerger’s disease) and Raynaud’s phenomenon.

h. Evaluate the risk factors predisposing to the development of superficial vein thrombosis and venous thromboembolism.

i. Discriminate between the clinical characteristics of superficial vein thrombosis and venous thromboembolism.

j. Compare and contrast the collaborative care and nursing management of patients with superficial vein thrombosis and venous thromboembolism.

k. Prioritize the key aspects of nursing management of the patient receiving anticoagulant therapy.

l. Relate the pathophysiology and clinical manifestations to the collaborative care of patients with varicose veins, chronic venous insufficiency, and venous leg ulcers.

**Learning Activities:**

a. **Learning Guide:** The Learning Guide for RNSG 1331 includes objectives and learning activities for each of the units of study. The student is to use this learning guide in conjunction with the daily plan to prepare for class.

   (C 1, 3)
b. **Auto-Tutorial:** For some units of study, audio-visual materials and computer-assisted instruction are assigned. Some videos will be viewed in class. Computer-assisted programs may be viewed in the learning laboratory. The student may be tested over material from videos or required computer-assisted programs. *(C 8, 18)*

c. **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. This course is fast paced, with new material covered daily. Class time is designed to supplement and clarify assigned learning activities. Please set up an appointment time with the appropriate faculty member, if further assistance is needed. *(F 11, 13, 16)*

d. **Class Presentation:** A variety of teaching methods (lecture, discussion, demonstration, guest lectures, small group activities, computer-assisted instruction, and 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 coming to class. *(F 13)*

e. **Drug Information:** Drugs pertaining to the units of study are listed in writing in the learning guide. The student will be required to identify generic name, trade name, action, usual dosage range, therapeutic effect, toxic effects, side effects, contraindications, essential nursing assessments, and essential client teaching of these drugs after the unit has been discussed in class. Also, the student must demonstrate basic mathematical skills necessary for practical problem solving for drug administration. *(F 3, 4)*

**Equipment and Materials: (if applicable)**

*List equipment or materials needed to conduct the lesson.*

1. Instructor-prepared handouts
2. Computer
3. Projector

**Audio-Visual Aids:**

1. Youtube videos
2. Powerpoints
3. MEDCOM Trainex Videos available on the CTC Library website

**Lesson Outline:**

a. Content covered: Definitions, pre-hypertension, Influencing factors, Etiology and pathophysiology, Classifications, Risk Factors, Clinical manifestations, complications, Diagnostic testing, Collaborative care, Geriatric considerations, hypertensive crisis and nursing care and management using the nursing process

b. Disorders Covered: Coronary artery disease, acute coronary syndrome and atherosclerosis. Content covered: Etiology and pathophysiology, Risk Factors, Clinical manifestations, complications, Diagnostic testing,
c. Disorders covered: Aortic aneurysms, aortic dissection, acute arterial ischemic disease, Raynaud’s, Buerger’s, peripheral artery disease, venous disorders, venous thromboembolism with anticoagulant therapy, varicose veins, chronic venous insufficiency and venous leg ulcers. Content covered: Definitions, etiology and pathophysiology, classifications, risk factors, clinical manifestations, complications, diagnostic testing, collaborative care and nursing care and management using the nursing process.
CENTRAL TEXAS COLLEGE DEPARTMENT OF NURSING
Principles of Clinical Decision – Making (RNSG 1331)

COURSE & TESTING POLICY

1. Exams I, II, III and IV will consist of 75 questions. The comprehensive Final Exam will consist of 80 questions. Dosage calculations will be included in each exam, and students must show written work. All dosage calculation problem solving steps must be documented following the question and the final answer must be written on the exam in the designated area with the corresponding unit(s) of measure, scantron answers for math will be hand-marked by instructors. Department of Nursing “Dosage Calculations for Administration Rules for Rounding Off” must be followed. Any question lacking documentation of mathematical steps, even if the correct answer is recorded in the designated area, will be marked as incorrect.

2. A minimum total of 300 points of a possible 400 (75%) must be achieved in order to complete RNSG 1331 successfully. There is no rounding of the final theory average.

3. Written examinations will be given on the dates noted on the daily plan. Is a student cannot attend an examination; the course coordinator/faculty must be notified before the examination is given. According to the Central Texas College catalog, “When absence from class is necessary for any reason, it is your responsibility to arrange to make up assignments missed during the absence. Students are required to notify the instructors in advance of any absence to retain the privilege of submitting make-up work without grade penalty.” Make-up examinations may be in an alternate format. RNSG 1331 follows the testing policy published in the Department of Nursing Student Handbook. Students requiring a make-up exam will report to the Department of Nursing at 9 am on the Friday following the missed exam. Due to the CTC class schedule, two hours will be the maximum time limit for the completion of Exam I, II, III and IV. A maximum of two hours will be allotted to complete the final exam.

4. A test review will be provided following each exam, including the final exam. The time will be announced prior to the exam. Attendance is voluntary.

5. Challenges to test questions must be documented during the test review. To challenge a question during the test review, you must write the question number and your rationale for your choice on the back of the PAR Score sheet or exam. These comments will be reviewed by the course faculty and their decision will be final.

6. A student scoring less than 75% on any exam must make an appointment with the course faculty for exam review and counseling. (Appointments are optional for scores > 75%). According to Department policy, individual appointments with the course faculty must be made within one week of the test date for individual review of the 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 or any prior test question challenged.

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

8. Failure to make the required 850 on the HESI (Health Assessment) will require that the student do 2 (two) hours of online remediation. If a student fails to perform the required remediation, they will have 2 (two) of their participation points deducted. Remediation is to help the student better understand the questions and content of the HESI Exam.
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 (gtt)/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. Amounts less than 1 should be preceded by a 0 and a decimal point. 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. Microdrip tubing has a drop factor of 60gtt/mL. Macrodrip tubing has a drop factor of 10, 15, or 20 gtt/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 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 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

I fully understand the HESI Total Testing policy as outlined on page 4.

Students requiring a make-up exam will report to the Department of Nursing at 9 am on the Friday following the missed exam.

My signature acknowledges receipt of, and understanding of, the RNSG 1331 Course & Testing Policy and receipt of the RNSG 1331 Syllabus.

Printed Name ___________________________ Signature ___________________________ Date ____________