HOUSTON COMMUNITY COLLEGE SYSTEM
ASSOCIATE DEGREE NURSING PROGRAM

RNSG 1105
Summer 2013

Nursing Skills I

Smith CRN# 49415, 49416
(Monday, Tuesday)
Saddler 49413 (Monday)
Bollinger 49411 (Monday)
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I. COURSE DESCRIPTION - RNSG 1105

Study of the concepts and principles essential for demonstrating competence in the performance of nursing procedures. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. (1 credit - 3 lab hours)

II. PRE-REQUISITES

RNSG 1413 Foundations for Nursing Practice
RNSG 1360 Clinical Nursing Foundation
RNSG 1115 Health Assessment

III. CO-REQUISITES

RNSG 1441 – Common Concepts of Adult Health

IV. COURSE LEARNING OUTCOMES

Describe concepts and principles that are basic to the safe performance of nursing skills, and demonstrate competence in the performance of nursing procedures.

V. METHODS OF ACCOMPLISHING LEARNING OUTCOMES

1. Classroom lecture/discussion
2. Multimedia - Computer Aided Instruction and Video use
3. Nursing Skills Lab

VI. EVALUATION

One (1) unit examination consisting of a maximum of fifty (50) items will be administered during specified, scheduled date. The exam is worth 50% of the final grade. No more than one hour will be provided for the exam.

Student will have a practicum worth 50% of final grade.
3. Lab Grading: See grade sheet

Grading Scale:

A = 90 - 100
B = 80 - 89
C = 75 – 79
D = 60 – 74
F = below 60

*In order to pass a course with a RNSG prefix, a minimum grade of “C” must be achieved.

VII. ATTENDANCE AND TARDINESS

Students are expected to attend all scheduled classes. Absences exceeding 12.5% (1 absences) may result in the administrative withdrawal of the student from the course. Daily classroom attendance records will be maintained. It is the responsibility of the student to sign the attendance record on a daily basis. Students will not sign for other students. Failure to sign the roll will constitute an absence for that day.

A student who exceeds the allowed absences can be administratively dropped from the course and would not be allowed to progress in the ADN program.

VIII. EXAM PROCEDURES

1. A period of up to 60 minutes will be given for the unit exam.

2. Students who **score less than 75 on an exam must** make an appointment to review the exam with the faculty within one week, and will also meet with the program counselor.
IX. GRADE SHEET

RNSG 1105 – Nursing Skills I

Print Last Name ____________________________________________

Print First Name ___________________________________________

Student Signature: (neatly) __________________________________

Grading Scale:  
A = 90 - 100  
B = 80 - 89  
C = 75 – 79  
D = 60 – 74  
F = below 60

Final Exam ___________ X .50 ___________

Practicum _____________ X .50 ___________ ___________

TOTAL ___________

COURSE FINAL GRADE ______________
X. TESTING PROTOCOL

To insure quality education and equality to all students in the Associate Degree Nursing Program, the following special conditions will apply during testing situations.

1. The instructor controls the options of seating arrangement, movement, leaving the room, and stopping an exam for violation of scholastic honesty.

2. All books, papers, notebooks, and personal belongings will be placed away from the desk before testing begins. **No palm pilots or cell phones allowed in testing area.**

3. Any verbal or nonverbal communication between students during a testing situation will be grounds for the termination of the testing. A grade of zero will be recorded and averaged into the final grade.

4. Should a student need to communicate with the instructor, remain seated and raise hand.

5. Any infractions of scholastic honesty will be grounds for dismissal from the program.

SCHOLASTIC DISHONESTY POLICY - SEE **HCCS STUDENT HANDBOOK CURRENT EDITION.**

Honesty in the Classroom: See Associate Degree Nursing Program Student Handbook, Current Edition.

XI. REMEDIATION

If a student needs remediation, an appointment may be made with an instructor during their designated office hours. Faculty office hours will be posted outside faculty offices.

Remediation will be available to any student enrolled in RNSG 1105 who expresses the need for this service. It is expected that the student will **make an appointment at least one week ahead of time** and come to the session prepared. Student responsibilities include bringing textbook, lecture notes, questions or topics for discussion and are to follow through with all instructor-made assignments. Students will receive extra assignments to facilitate their learning. Successful remediation necessitates an active role for both students and faculty.
XII. POLICIES

All students will adhere to HCCS policies as delineated in the current HCCS catalog and ADN handbooks.

“Notice: Students who repeat a course three or more times may soon face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor/counselor about opportunities for tutoring/other assistance prior to considering course withdrawal, or if you are not receiving passing grade.

XIII. SPECIAL NEEDS – COMPLIANCE WITH AMERICAN WITH DISABILITIES ACT (ADA)

Any student with a documented disability (e.g. physical, learning, psychiatric / mental health, visual, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at their respective college at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office.

If a student has a disability or needs instructional accommodation due to a disability, please meet with the instructor at the beginning of the course. Documentation must be provided at this time with an official letter of accommodation. The information in this publication will be made available in large print, taped or computer –based format upon request.

Students with special needs should refer to the procedure identified in the HCCS Student Handbook. The procedure may be started with a phone call to the J.B. Coleman College of Health Sciences Disabilities counselor.

XIV. ACADEMIC INFORMATION

Students are responsible for reading the Houston Community College System Student Handbook to be certain that they understand HCCS policies/procedures which also includes Refunds and Withdrawals from a course.

XV. ADN HANDBOOK

Students are responsible for reading the Associate Degree Nursing Program Student Handbook.
XVI. COURSE EXPECTATIONS CONTRACTUAL AGREEMENT

HOUSTON COMMUNITY COLLEGE SYSTEM

RNSG 1105 - NURSING SKILLS I

I, ____________________________________________, have read the RNSG 1105 syllabus and fully understand the expectations of me as a student in this course.

I acknowledge that I am aware that the current Houston Community College A.D.N. Student Handbook is on the course website (Moodle) and that I am accountable for following the policies and procedures discussed in the handbook.

In addition, I agree to uphold the honesty policy by neither giving nor receiving any information about test content in this course.

Failure to submit a signed agreement will be considered a breach of contract and I will be administratively dropped.

My signature below signifies my willingness to comply with the course requirements.

______________________________

Print Last Name

______________________________

Print First Name

______________________________

Signature

______________________________

DATE
XVII. REQUIRED TEXTBOOKS

A. Required: Be sure you purchase the latest edition.

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>TEXTBOOK</th>
<th>PUBLISHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Morris, Deborah</td>
<td>Calculate with Confidence 5th Edition</td>
<td>Mosby/Elsevier</td>
</tr>
<tr>
<td>4.</td>
<td>Nursing Practice Act (Current via web page)</td>
<td>BNE for the State of Texas</td>
</tr>
<tr>
<td>7. Corbitt, JJ</td>
<td>Laboratory Tests and Diagnostic Procedures with Nursing Diagnosis</td>
<td>Pearson/Prentice Hall</td>
</tr>
</tbody>
</table>

B. Recommended Reading:
Any supplemental reading materials or learning tools that are listed in each syllabus or will be announced by the instructor of the course.

b. A Med deck or nursing medication handbook.
c. A manual of diagnostic tests.
XVIII. PROFESSIONAL BEHAVIOR

1. Students are to remain quiet during class time. Should a student need to ask a question or communicate with the instructor, the student is to raise their hand.

2. Students should refrain from interrupting when someone is speaking.

3. Any student disrupting the class may be asked to leave the classroom at the discretion of the instructor.

4. In consideration of others and of safety, no children are to be brought to the lab skills area or to the classroom. Frequently, the content presented in the classroom is inappropriate for children. Please be aware that children are distracting to other students trying to take notes or exams.

5. Students must abide by the appropriate standards of conduct identified in the student handbook including language and professional behavior.

6. **All cell phones and pagers are to be turned off during class time.**
XIX. COURSE CONTENT

Unit 1: Concepts and principles related to nursing skills for clients with alterations in endocrine functioning

Learning Outcomes:

1.1 Identify normal blood glucose levels

1.2 Demonstrate accurately the procedure for finger stick blood sugar monitoring

1.3 Enumerate the types of insulin and method of action including onset, peak and duration of action

1.4 Identify various peripheral blood glucose monitoring equipment with specific attention to cost and ease of use

1.5 Demonstrate proper techniques in the administration of insulin

1.6 Develop a diet plan for a diabetic client with special attention to cultural factors that affect dietary patterns


Content

Monitoring Glucose Levels
Insulin Therapy
Oral Agents
Nutritional Therapy
Unit 2: Concepts and principles related to nursing skills for clients with alterations in gastrointestinal functioning

Learning Outcomes:

2.1 Identify by name, appearance and purpose nasogastric and intestinal tubes.

2.2 Describe the assessment of the client with gastric or intestinal intubation.

2.3 Demonstrate the insertion of a nasogastric tube for suctioning or feeding.

2.4 Formulate a plan of care for the client with enteral and parenteral feedings.

2.5 Identify foods allowed and not allowed on selected diets related to clients with gastrointestinal problems.

2.6 Develop a dietary teaching plan for each of the selected diets.


Content

Gastrointestinal Intubation
Tube Feedings
Gastrostomy
Nasogastric Tubes: insertion, jtubefeeding, and management
Unit 3: Concepts and principles related to nursing skills for clients with alterations in respiratory functioning

Learning Outcomes:

3.1 Incorporate knowledge of pulmonary anatomy and physiology to identify assessment criteria associated with hypoxia.

3.2 Review types, purposes and application of various oxygen devices.

3.4 Describe the uses of incentive spirometry as it applies to clients with pulmonary problems.

3.5 Demonstrate the appropriate techniques for performing chest physiotherapy.

3.6 Demonstrate appropriate techniques when performing oral and tracheal suctioning.

Reading Assignments:


Content
Assessing Respiration
Assessment of Thorax and Lungs
Pulse oximeter/ Incentive spirometry/ Suctioning-nasopharyngeal,
Oropharyngeal, nasotracheal
Nasopharyngeal/ airway/
Tracheal suctioning and trach care
Oxygen devices such as tanks, nasal cannulas, and oxygen masks
Bag and Mask Resuscitation (ambu)

Oxygen Therapy
Tracheostomy care introduction
Unit 4: Concepts and principles related to nursing skills for clients with alterations in cardiovascular functioning

Learning Outcomes:
4.1 Utilize knowledge of cardiac anatomy and physiology to identify appropriate assessment parameters for determining the status of cardiovascular functioning.

4.2 Incorporate the assessment of health patterns and cardiac risk factors into the health history and physical assessment of the client with cardiac problems.

4.3 Demonstrate physical assessment techniques for peripheral vascular function.

4.4 Describe variations in cardiac and peripheral vascular assessment findings in the older adult.

4.5 Discuss the indications for common laboratory and diagnostic tests appropriate for clients with cardiac problems.

4.6 Identify the clinical significance and related nursing implications of the various tests and procedures used for diagnostic assessment of cardiac function.

4.7 Develop a dietary teaching plan regarding low fat and low salt food for the client with cardiovascular problems.


Content

Anatomy and Physiology of Cardiovascular System
History and Physical Assessment
Diagnostic Studies

Assessing the Cardiovascular System
Unit 5: Concepts and principles related to nursing skills for clients with alterations in urologic / renal functioning

Learning Outcomes:

5.1 Determine appropriate diet / food content for clients with urinary calculi.

5.2 Formulate a plan of care for the client with urinary calculi.

5.3 Review guidelines for fluid administration for clients with fluid volume deficits / excess.

5.4 Formulate a plan of care for the client with an infection of the upper or lower urinary tract.


Content

Anatomic and Physiologic Overview
Assessment
Diagnostic Evaluation

Urinary catherization
IV starts and maintance

Fundamental Concepts Fluid Volume Disturbances Parenteral Fluid Therapy (Intro)

Common Fluid/Electrolyte Disturbances (Intro)
Unit 6: Concepts and principles related to nursing skills for clients with alterations in neurological functioning

Learning Outcomes:

6.1 Identify interview questions pertinent to the assessment of neurologic functioning.

6.2 Demonstrate physical assessment techniques for neurologic function, including examination of mental status, cranial nerves, motor and sensory nerve function, cerebellar function, and reflexes.

6.3 Describe changes in neurologic function with aging and their impact on neurologic assessment findings.

6.4 Discuss diagnostic tests used for assessment of neurologic function and their related nursing implications.

6.5 Explore critical thinking scenarios for the neurologically impaired client.


Content

Anatomy and Physiology Neurological System
History and Physical Assessment
Cranial Nerve Assessment (Intro)
Diagnostic Studies

Altered Level of Consciousness (Intro)


Assessing the Neurologic, Musculoskeletal, & Peripheral Vascular Systems
Unit 7: Concepts and principles related to IV therapy and math calculations; Introduction to Critical Care Math


**DOSAGE CALCULATIONS**

The Metric System

- The primary units of measurements of the metric system are *gram* for weight, *liter* for volume, and *meter* for length.
- Gram (g) 1 g = 1000 mg
- Milligram (mg) 1 mg = 1000 mcg, or 0.001 g
- Microgram (mcg {ug}) – 1 mcg = 0.001 mg = 0.000001 g
- Kilogram (kg) – 1kg = 1000 g

**Ratio And Proportion**

- Recall the equivalents
- Set up a proportion of two equivalent ratios, and
- Cross multiply to solve for an unknown quantity, X.

**Ratio And Proportion**

- Left Side
  - Dosage Available : Known (vol/tab/cap)
- Right Side
  - Dosage Prescribed : Unknown (vol/tab/cap)

**Example:**

- Order: Naproxen 375 mg po q6h
- Available: Naproxen 125 mg/5ml
- 125 mg : 5 mL :: 375 mg : X mL
- 125X = 1875
- 125/125 = 1875/125
- X = 15 mL
Conversion Factor

- In order to perform dosage calculations, you must be able to convert between systems of measurement.
- To use conversion factor method, recall the approximate equivalent, identify the conversion factor, and

Conversion Factor

- **MULTIPLY** by the conversion factor to convert to a SMALLER unit.
- **THINK:** Larger to smaller (X)
- **DIVIDE** by the conversion factor to convert to a LARGER unit.
- **THINK:** Smaller to larger (divide)

Conversion Factor

- **Multiply** (larger to smaller)
  - Example: 3 L = X mL
  - Equivalent: 1 L = 1000 mL
  - $3 \text{ L} = 3 \times 1000 = 3000 \text{ mL}$

- **Divide** (smaller to larger)
  - Example: 400 mg = X g
  - Equivalent: 1 g = 1000 mg
  - $400 \text{ mg} = 400/1000 \text{ or} \ 400 = 0.4 \text{ g}$

Approximate Equivalents

- 1 g = 15 gr
- 1 gr = 60 mg
- 1 teaspoon = 60 mg
- 1 Tablespoon = 3 teaspoons = 15 mL
- 1 ounce = 30 mL = 6 teaspoons
- 1 kg = 2.2 lb
- 1 pint = 500 mL

Approximate Equivalents

- 1 g = 1000 mg
- 1 mg = 1000 mcg or 0.0001 g
- 1 kg = 1000 g
- 1 teaspoon = 5 mL

Oral Dosage of Drugs

- **Order:** Keflex 500 mg
- **Available:** Keflex 500 mg per capsule
- 500 mg : 1 cap :: 500 mg : X
- $500 \times 500$
• 1 Keflex 500 mg capsule

Oral Dosage of Drugs

• Order: Ampicillin 0.5 g p.o. q.i.d.
• Available: Ampicillin 250 mg per capsule
• Step 1: Convert: To same units
• Equivalent: 1 g = 1000 mg Conversion factor is 1000.
• Larger to smaller (multiply)
• 0.5 g = 0.5 X 1000 = 500 mg
• Cross out the 0.5 g in the order, and write 500 mg above it.

Oral Dosage of Drugs

• Order: Ampicillin 500 mg
• Available: Ampicillin 250 mg capsules
• Step 2: Calculate
  • 250 mg : 1 capsule :: 500 mg : X
  • 250 X = 500
  • 250/250 = 500/250
  • X = 2 capsules given orally 4 times daily

Oral Dosage of Drugs

• Order: Codeine Sulfate gr ¾ p.o. q. 4h p.r.n. pain
• Available: Codeine Sulfate 30 mg per tablet.
• Convert gr to mg
• Equivalent: 1 gr = 60 mg Conversion factor is 60 (larger to smaller (multiply))
• ¾ X 60 = ¾ X 60/1 = 180/4= 45 mg

Oral Dosage of Drugs

• Order: Codeine 45 mg
• Available: Codeine 30 mg tablets
• 30 mg : 1 tablet :: 45 mg : X
• 30X = 45
• 30/30 = 45/30
• X = 1.5
• Give 1 ½ tablets every 4 hours as needed for pain

Three-Step Approach

• Step 1
  — Convert: to units of the same system and the same size.
• Step 2
  — Think: Estimate for a reasonable amount to give

• Step 3: Calculate
  Available: Unit :: Order : Unknown

Oral Dosage of Drugs

• For most dosage calculation problems:
  — Convert to smaller size units g to mg
  — Convert to metric system

• Consider the reasonableness of the calculated amount to give. Example: you would question giving 10 tablets or capsules per dose for oral administration.

Oral Dosage of Drugs

• The physician writes an order for Diabinese 0.1 g p.o. q.d. The drug container label reads Diabinese 100 mg tablets.

• Give __________ tablets (s)
  Parenteral Dosage of Drugs

• The term parenteral is used to designate routes such as IM, SC, ID, and IV.
• IM = intramuscular, SC = subcutaneous tissue, ID intradermal (under the skin), IV = intravenous.

Parenteral Dosage of Drugs

• Rule: the maximum dosage volume to be administered per intramuscular injection site for:
  • An average 150 –lb adult = 3 mL
  • Children age 6 to 12 years = 2 mL
  • Children birth to age 5 years = 1 ml

• If more needs to be given divide the dose into two injections.
  Parenteral Dosage of Drugs

• As you calculate parenteral dosages:
  — Round X (amount to be administered) to tenths if the amount is greater than 1 mL and measure it in a 3 cc syringe.
  — Measure amounts of less than 1 mL rounded to hundredths in a tuberculin syringe.
  — Amounts of 0.5 to 1 mL, rounded to tenths, can be accurately measured in either a tuberculin or 3 cc syringe.

Parenteral Dosage of Drugs

• Order: Bentyl 20 mg IM qid
• Available: Bentyl injection 10 mg per mL in a 10 mL multiple dose vial.
• How many milliliters should be administered to the patient.
• Step 1 Convert: No conversion
• Think: you want to give more than 1 mL. You want to give twice as much.
  Parenteral Dosage of Drugs

• Step 3 Calculate:
  • 10 mg : 1 mL :: 20 mg : X
• 10X = 20
• 10/10 = 20/10
• X = 2 mL

Parenteral Dosage of Drugs
• The drug order reads Bricanyl 0.25 mg SC bid. The ampule is labeled 1 mg per mL.
• Step 1 Convert: no conversion
• Step 2 Think: you want to give 0.25 of a mL

Parenteral Dosage of Drugs
• Step 3 Calculate
• 1 mg : 1 mL :: 0.25 mg : X
• 1X = 0.25
• 1/1 = 0.25/1
• X = 0.25 mL

Parenteral Dosage of Drugs
• The drug order reads Morphine sulfate gr1/6 IM q 3-4 h prn, and the label on the Tubex syringe states Morphine sulfate 15 mg per mL.
• Step 1 Convert
• Equivalent: 1 gr = 60 mg
• Larger to smaller (multiply)
• Gr 1/6 X 60/1 = 60/6 = 10 mg

Parenteral Dosage of Drugs
• Order: Morphine sulfate 10 mg
• Available: Morphine sulfate 15 mg per mL.
• Step 2 Think: you want to give less than 1 mL but more than 0.5.

Parenteral Dosage of Drugs
• Step 3 Calculate:
• 15 mg : 1 mL :: 10 mg : X
• 15 X = 10
• 15/15 = 10/15
• X = 0.67 mL = 0.7 mL
• This dose is rounded to tenths because the medication is supplied in a Tubex syringe, which is calibrated in tenths.
Parenteral Dosage of Drugs

- Order: Codeine gr ¼ SC q 4h prn pain.
- Supply: 20 mL vial codeine labeled 30 mg per mL
- Give _______mL.

Parenteral Dosage of Drugs

- Injectable medications in powder form.
  - When reconstituting injectable medications, you must determine both the type and amount of diluent to be used.
  - You must determine the volume in mL of diluent to be used, then reconstitute the drug and note the resulting supply dosage on the vial.

Parenteral Dosage of Drugs

- Example: Kefzol Sterile Sodium 500 mg
- Dosage: To prepare solution add 2 mL Sterile Chloride injection. Provides an approximate volume of 2.2 ml (225 mg per mL)
- 500 mg add 2 ml (volume of 2.2 mL) equals 225 mg/mL

Parenteral Dosage of Drugs

- Order: Ancef 750 mg IM q 8h
- Supply: 1 g vial of powdered Ancef with directions on the right side of the label as follows: For IM use, add 2.5 mL Sterile Water…..Provides an approximate volume of 3.0 mL (330 mg/ML).

Parenteral Dosage of Drugs

- Step 1 Convert: no conversion
- Step 2 Think: you want to give more than 1 mL. You want to give more than twice as much as 330 mg or more than 2 mL.
- Step 3 Calculate:
  - 330 mg : 1 mL :: 750 mg : X
  - 330 X = 750
  - 330/330 = 750/330
  - X = 2.27 mL; rounded to 2.3 mL

Parenteral Dosage of Drugs

- Order: Geopen 500 mg IM q6h
- Reconstitute with ____ml diluent and give ____ml.
- Label reads: Geopen 2 g for IM use reconstitute with at least 4 mL of sterile water for injection, up to 7.2 mL of sterile water for injection can be used.
  - 4.0 mL = 2.5 mL for a 1 g dose
  - 5.0 mL = 3.0 mL for a 1 g dose
  - 7.2 mL= 4.0 mL for a 1 g dose

Parenteral Dosage of Drugs

- Step 1 Convert g to mg
• smaller to larger (divide)
• Equivalent 1 g = 1000 mg
• 500/1000 = 0.5
• Order: Gepen 0.5 g
• Available: Gopen 1 g per 3 mL
• Step 2 Think: you want to give ½ gram, which will be ½ of 3 mL.

Parenteral Dosage of Drugs

• Step 3 Calculate:
• 1 g : 3 mL :: 0.5 g : X
• 1X = 1.5
• 1/1 = 1.5/1
• X = 1.5

Parenteral Dosage of Drugs

• Order: Penicillin G potassium 300,000 Units IM qid
• Supply: Penicillin G potassium 1,000,000 U vial.
• 9.6 ml = 100,000 units/mL
• 4.6 ml = 200,000 units/mL
• 1.6 ml = 500,000 units/mL
• Reconstitute with ___mL diluent and give_____mL.

Three Step Approach
Intravenous Calculations

• Electronic Intravenous Flow Regulators
• Must set pump at mL/hr
• Order: Ampicillin 500 mg in 100 mL D5W IVPB.
• Infuse in 30 minutes
• 100 mL : 30 min :: x mL : 1 hr (60 min)
• 30X = 6000
• X = 200 mL
• Set the pump at 200 mL/hr to deliver 100 mL in 30 minutes.
Intravenous Calculations

• Step-By-Step Method
• mL/h
  — Total mL fluid to be given divided by hours to run.
  — Infusion time in 1 hour or less formula is amount of solution divided by time in minutes multiplied times drop factor = drops/min.
Intravenous Calculations

- **mL/min**
  - Milliliter per hour divided by 60 minutes = mL/min
- **gtts/min**
  - mL/min multiplied time drop factor = gtts/min

Intravenous Calculations

- **Order 1000 cc D5W to run 8 hours**
- 1000 cc divided by 8 hours = 125 cc/h
- 125 cc/h divided by 60 minutes = 2.1 cc/min
- 2.1 mL/min multiply by drop factor (10 gtts) = 21 drops/min.

Intravenous Calculations

- **500 cc D5RL IV to run 12 hours**
- Administration set: microdrop (60 gtts/cc)
- The IV should be regulated to deliver how many drops per minute?
- 500/12 = 41.66 or 42 cc/h
- 42 cc/h/60 min = 0.7 cc/min
- 0.7 cc/min X 60 drops/cc = 42 gtts/min.

Intravenous Calculations

- **Bactrim 500 mg IV in 150 cc D5W**
- Administer in 90 minutes, drop factor is 10 gtts/mL.
- What is the drop rate?
- 150 cc/1.5 hours X 10 gtts/mL/60 minutes
- = 16.6 or 17 gtts/min
- Remember to change the minutes to decimal form.

Intravenous Calculations

- **Aldomet 250 mg IVPB in 100 cc D5W**
- Administer in 45 minutes
- Administration set: 10 gtts/cc
- What is the drop rate?
- 100cc/45 minutes X 10 gtts/cc = 22.22 or 22 gtts/min.

Intravenous Calculations

- **Macrodrop (10 gtts/mL)**
- **Microdrop (60 drops/mL)**
XX. **Early Alert Syllabus Statement**

The Houston Community College Early Alert program has been established to assist in the overall effort to retain students who are at risk of failing, withdrawing, or dropping a course. This process requires instructional faculty and student staff to identify students who are performing poorly as early as possible and provide relevant support services to help students overcome their deficiencies. A student is identified when an instructor notices academic or personal difficulties that affect student’s academic performance. The possible problem (s) could be tardiness, missed/failed test scores, excessive absences, or a number of other circumstances. Once a referral is made counselors will then contact students to discuss the issues and possible solutions to their academic difficulties.

XX1. **EGLS3 -- Evaluation for Greater Learning Student Survey System**

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.