**Pharm-Tech Lesson Plan (4/27/15-5/1/15) Debra Hurt**

* **HOSA meeting this week.**

Class Assignments:

Do Now: What are the symptoms of hypoglycemia and hyperglycemia

Pharmacy Math:

 1. Independent activity-Drug formula Oral and parental route

 2. Essential Drug Dosage Calculations using the 200 Drug List (Medical Math)

 **3, TB drugs and Diabetes drug treatment**

**4/28/15-4/29/15**

**a. Proportions/ratios**

**b. Dosage Calculations**

**5/1/15**

**Agenda:**

1. Pharmacology quiz (Drug list)

2. Complete worksheet on TB medications/diabetic medication

3. Skill Practice-administer TB skin test on an orange. On self or a lemon.

4. Prefilling unit dose carts/home health prescription boxes with home health patients.

**5/1/15**

Video “The Most Dangerous Drugs Prescribed” or work on Special Project (If time permits)

**MASTERY FOCUS**  **(PL-2, PL-3, I-1, I-6) Pharmacy Technician**

**Essential Understanding:**

Student will understand the clear concise method to develop competence in the interpretation of medication orders and the calculation of safe medication dosages. The Principles of Pharmacy is essential in that all health care workers understands the classification of various drugs used in the pharmaceutical treatment of diseases and conditions of the different body systems.

**Lab Practice:** Skill Practice using proportions, multiplication, division and drug formulas to prepare medication for nurses to administer on unit floors in hospital and outpatient facilities/private homes. Student will demonstrate how to give TB skin test and insulin injections with the correct dosage.

Student will demonstrate glucose testing.

**Standards: What will students know, understand, and be able to do?**

**Student will know how to calculate and prepare prescriptions for inpatient and outpatient use and explain why it is important for pharmacy technicians to comply with regulatory standards.**

**Objectives:**

1. Student will be able to list and define common diseases affecting the skin and understand the causes, symptoms, and pharmaceutical treatment associated with each disease

2. Student will be able to describe the metric, apothecary and household systems of measures to problem- solve methods of calculation to prescribe the correct dose.

3. Student will be able to prefill medication carts correctly.

4. Student will be able to explain information to educate patient on the safe use of prescription and OTC medications.

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| **TEKS**1 (D), 1 (E), 9 (B), 10 (A) | **ELPS**[Boggle's World ESL Activities | Project SHINE](http://www.google.com/url?sa=t&rct=j&q=boggle%20esl&source=web&cd=13&cad=rja&uact=8&ved=0CFQQFjAM&url=http%3A%2F%2Fwww.projectshine.org%2Fboggles-world-esl-activities&ei=9OPCVIL2LMy0yAT264GACA&usg=AFQjCNF6zIibOBHiW04Ye4oWHVS43km9Wg)( |

**Key Vocabulary: What key terms will my students need to understand?**

**Key Terms:** Compounding procedures

1. DEA number 7. OBRA

2. Re-packaging 8. Body Systems

3. Unit dose 9. TB skin test

4. Distributing 10. Diabetes Type I or Type II

5. Patient Privacy Act 11. Pharmaceutical treatment

6. Packaging 12. Regimen

**Assessment Plan:** Discuss knowledge of key terms.

Do- Now quiz

 Practice medication problems

 Student demonstrations and feedback-Skill practice

 Special Project![MC910217008[1]]()![MC900441976[1]]()

 Six-week test/Final Exam

**LESSON CYCLE** I. Students Will learn the common illnesses of the body systems, illnesses and treatment regimens. Why It Is Important? (**The students need to know the common diseases and illnesses of each body system, the causes, symptoms, and pharmaceutical treatment associated with each system).**

II. Introduction to New Material –

1. **Lab work book exercises**
2. **Review content in text book and handouts**
3. **Review computer software on** Health Century 21.**(Medical Math)**

 d. **U-tube video**

 e. **Demonstrate skill practice and feedback**

III. Guided Practice

1. **Teacher will clarify and check for understanding by asking open-ended questions. Teacher will pace the classroom to clarify misunderstanding.**
2. **Teacher will introduce content to be learned and review key terms.**
3. **Teacher will demonstrate skill practices.**
4. **Teacher will review agenda and objectives daily**

**e. Teacher will review resources and equipment needed to problem solve student**

 **centered- lessons**.

IV. Independent Practice

1. **Student to define and write key terms.**
2. **Student to take notes from PowerPoint/U-tube Videos**
3. **Student to complete homework**
4. **Student to complete worksheets in class**
5. **Student to study the 200 drug list for certification prep.**
6. **Student to learn Metric calculations used to prepare medications.**
7. **Groups and independent practice student will calculate drug problem per MD orders using the parental, orals and other routes to administration.**
8. **Student will demonstrate filling unit dose packaging.**
9. **Student will take free PTCB practice tests**
10. **Student will complete report & present special project on the body system chosen.**

V. The Closing – **Classroom discussions to check for understanding. Ask students did we meet and learn the objectives for the day. Play kahoot-it or collect exit tickets r games to check for mastery. Teacher will to clarify misunderstanding.**

**How will I engage my students in learning? How will I lead my students to mastery?**

 **CHECKS FOR UNDERSTANDING (I-2)**

|  |  |
| --- | --- |
| 1. **Engage and Connect (30-min):**

**Do Now:** 15 minutesHands on group activityIndependent practiceOnline group studies PTCB practice testActivity Stations in the classroom for skill practice. | Review Do NowClarify misunderstandingAllow students to demonstrate preparing medication Demonstrate given and reading TB skin test insulin injections and BS testing. |
| 1. **Introduce New Learning (15-20 min):**

Present PowerPoint-Tuberculosis and DiabetesIntroduction to Medical Math-Health Center 21Demonstrate skill practice using medication problems.Summarize the uses of prepackage medicationsExplain u-tube videos demonstrations | Student provide feedback by demonstrating skills.Student are able to voice why lesson is important during guided questions.Students ask questions as needed. |
| 1. **Lead Guided and Independent Practice (25 min):**

**Guided Practice (10 min):****Independent Practice (25-30 min):**  | Clarify misunderstanding. By asking questions and reteach material as needed.Allow students to demonstrate practice filling prescriptions and medication carts, administer medications to patients, and a practice glucose testing..Practice compounding IV medications and calculating drip factors.Practice putting on and removing sterile gloves. (**completed**)Complete lab worksheetComplete homework |
| 1. **Close the Lesson and Assess Mastery (10 min):**
 | Check understanding by open ended questions involving all students.Play Kohoot.Exit ticket QuizzesTestPlay medical Termo |

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**DIFFERENTIATION (I-3)**

**How will I scaffold and/or accelerate learning? For whom? How will I group my students?**

**SCAFFOLD:** 200 drug list a resource to learn drugs for the certification test. PowerPoint presentations- Medical Math. **Internet research (Pharmacy Tech Certification Board).**

**ACCELERATE:** Have students read power point and PTCB website as a resource tool.

 **Group activity-** Student will prepare unit dose medications for hospital use and prepare medication for outpatient distribution. Student will orally communicate how to prepare and administer medication per MD orders.

**GROUP:** Group according to academic level (high performing students grouped with lower performing students. (4-5 students per group). ESL student grouped with a Spanish speaking student.

![MC900432573[1]]()**LOGISTICS** **(I-6, I-10)**

**What materials, resources, and technology will I need to prepare and arrange?**

* Text Book Unit dose packages Liquid medication bottle
* U-tube videos on skill practices Maalox Hydrogen peroxide
* Syringes Hydrogen peroxide Oral-gel (benzocaine)
* Sterile needles Medication labels Propel water
* Hand sanitizer Laminar Flow hood Pharmacy forms
* Sharp containers Spinach Gloves
* Oranges Emergen-C Head covers
* Alcohol pads Gatorade Eye Shields
* 4’ X 4’ gauze Bottle water Sterile gowns
* Sterile field Strawberries and bananas
* IV tubing Blueberries
* Medication vials and ampules Ice cubes
* Lab-top (technology based lesson)
* Diversified Health Occupational PowerPoint
* Case studies and Medication orders
* Medical Math –Health Century 21 PowerPoint/handouts
* Medication forms
* Clay bowls and mortar
* Tablet Cutter (Coupe-pilule)
* Pill Box/Pilulier
* IV Pole