**Pharm-Tech Lesson Plan (3/30-4/3/15) Debra Hurt**

* **Lesson may change due to STARR testing and Advocacy schedule this week**

Class Assignments: 1. Preparing Prescription using DEA numbers

 2. Pharmacy Forms

Pharmacy Math: 3. Essential Drug Dosage Calculations using the 200 Drug List

3/30/15-4/3/15

**Agenda:**

Do-Now-Kahoot quiz on 200 drug list practice for certification test

1. Individual activity to write a prescription using A. DEA numbers

 B. Inventory forms for narcotic/control substance.

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

**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 Technology in Pharmacy is essential to all health care workers.

Students will understand both the brand and generic names of drugs to help the learner become familiar with the correct dose forms. Pharmacy technicians must be familiar with the use of DEA numbers and forms used with controlled substances.

**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.

**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 describe the metric, apothecary and household systems of measures to problem- solve methods of calculation to prescribe the correct dose.

2. Student will demonstrate compound calculations using real-life scenarios.

3. Student will be able to describe the procedure for class A prescription balance.

4. Student will learn to read and interpret doctors’ orders to fill a prescription

5. Student will be able to accurately prepare medication labels

6. Student will identify compound equipment.

Lab. Objectives: 1. Student will list the routes of administration associated with prescription orders.

 2. Student will fill prescription using the system measures to calculate correct doses.

 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

3. Re-packaging

4. Unit dose

5. Distributing

6. Patient Privacy Act

7. Packaging

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

 Kahoot-it quiz

 **Do Now**: 1. Explain what are some of the important facts you needed to remember

When compounding medications?

2. Practice medication problems

 3. Student demonstrations and feedback-Skill practice

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**LESSON CYCLE** I. Students Will learn the key terms of the metric systems, compounding and drug formulas. Why It Is Important? (**The students need to know the meaning of the key terms and drug formulas to select the proper information needed to determine the correct dosage to administer to clients and to avoid prevent medication errors).**

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**

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**

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 other 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 pre-fill medication cart. |
| 1. **Introduce New Learning (15-20 min):**

PowerPoint- Medical MathDemonstrate skill practice using medication problems.Compound a medication for student practiceSummarize the uses of prepackage medicationsIntroduce to compounding.Explain 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 and administer medications to patients..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