**FLORIDA VOCATIONAL INSTITUTE**

**SYLLABUS/LESSON PLAN**

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| **Daily/Weekly Lesson Plan Outline – 4 weeks / 40 Clock Hrs. / 40 Lab Hrs.** | | | | | |
| **COURSE TITLE** | | | | **Review Date:** | |
| **Pharmacy Technician** | | | | **11/20/2015** | |
| **CODE** | **SUBJECT** |  |  | **LEC HRS** | **LAB HRS** |
| **PHT135** | **Aseptic and Extemporaneous Compounding** | | | 40 | 4 0 |
| **COURSE DESCRIPTION:** This course will explore and prepare the student to be able to adequate perform aseptic and extemporaneous compounding process. During the sterile compounding part of the course the student will be expected to performed the right aseptic technique under the laminar air flow hood, fully understand USP-797 guide lines, handling and disposal of waste products, documentation preparation such as Batch preparation, compound record and be able to determine product stability (Beyond date use). During the extemporaneous compounding part of the course the student will be expected to perfume the right extemporaneous compounding process and fully understand USP-795 guidelines, determine product stability (beyond date use) and to keep track of proper documentation such as formula sheets and compounding logs. Out-of-class activities will be assigned and assessed as part of this module. Instructor may provide additional resources or materials as a part of the lesson plan.  **Prerequisite:** None  **Required Resources:**  **Text Books:** Mosby's Pharmacy Technician: Principles and Practice 4e. Elsevier.  **Other:** Handout.  **Learning Resources Center materials are available**  **Instructional Methods:**  Lecture/Discussion  Audiovisual  Research  **Mode of Delivery:**  Residential  **Equipment**/**Technology/Software**  Utilization of Laminar air flow hood, digital pharmacy scales, hot plates, mortar and pestle, power point presentations, media center websites, reference materials, and other technology as available.  **COURSE OBJECTIVES:**  In this course, the Student will   * Explain the reason for an aseptic technique * Describe the need for standard precaution * Interpret the principles of an aseptic technique * Decide when to carry out an aseptic technique versus clean technique * Apply principles to Practice * Define the main elements of infection prevention control | | | | | |
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|  | **Objectives to be covered** | **Lecture/ Labs** | **Method of Assessment** |
| **Week 1** |  |  |  |
| **Day 1** | * Bulk Repackaging and Non–Sterile Compounding | **Lecture:**   * Explain the need for packaging products in the appropriate type and size of container. * List the steps in the bulk repackaging of medications. * List five reasons pharmacies often repackage bulk medications into unit dose packages.   **Laboratory:**   * Proper handling of medications during bulk repackaging. * Demonstrate how to complete a repacking logbook with the necessary information. | * Handout * Book Exercise |
| **Day 2** | * Bulk Repackaging and Non–Sterile Compounding | **Lecture:**   * Explain the importance of the accurate labeling of pharmaceuticals. * Explain the calculations used to determine the beyond-use date when repackaging. * List the common reasons for using unit dose medications. * Name three advantages of blister card packaging.   **Laboratory:**   * Describe the types of containers used for repackaged and compounded medications. | * Handout * Book Exercise |
| **Day 3** | * Bulk Repackaging and Non–Sterile Compounding | **Lecture:**   * Define non-sterile compounding. * List the common reasons patients need compounded medications. * Explain the important considerations in the storage and stability of compounded products.   **Laboratory:**   * Describe the equipment used in compounding drugs. | * Handout * Book Exercise |
| **Day 4** | * Bulk Repackaging and Non–Sterile Compounding | **Lecture:**   * Differentiate between the types of scales used to weigh compounds.   **Laboratory:**   * Demonstrate how to complete a compounding sheet with the necessary information. * Demonstrate compounding procedures. * Describe the types of dosage forms compounded for animal use. | * Handout * Book Exercise |
| **Week 2** |  |  |  |
| **Day 1** | * Practical Lab | **Laboratory:**   * Measuring Liquids Accurately | * Handout * Book Exercise |
| **Day 2** | * Practical Lab | **Laboratory:**   * Using Prescription Balance | * Handout * Book Exercise |
| **Day 3** | * Practical Lab | **Laboratory:**   * Compounding Exercise - Capsules * Punching Method | * Handout * Book Exercise |
| **Day 4** | * Practical Lab | **Laboratory:**   * Compounding Exercise - Solution * Compounding Exercise - Suspension | * Handout * Book Exercise |
| **Week 3** |  |  |  |
| **Day 1** | * Aseptic Technique and Sterile Compounding | **Lecture:**   * Explain why certain medications must be sterile. * Define common terms used in sterile compounding. * Describe Standard Precautions necessary when preparing compounded sterile preparations. * Describe standard supplies and equipment used to prepare compounded sterile preparations. * Explain the anatomy of a syringe and needle. | * Handout * Book Exercise |
| **Day 2** | * Aseptic Technique and Sterile Compounding | **Lecture:**   * List the sizes of syringes and needles used in the pharmacy setting. * Explain when and why filters are used in sterile compounding. * List the types of stock used within a clean room. * Describe various medication delivery systems. | * Handout * Book Exercise * In-service |
| **Day 3** | * Aseptic Technique and Sterile Compounding | **Lecture:**   * Explain the history of USP <797>. * List the main components of USP <797> regulations. * List the three risk levels of drug preparation determined by USP <797>. * Explain the differences between the various types of hoods.   **Laboratory:**   * Describe how often hoods must be inspected. * Describe how to properly clean various types of hoods and prepare them for use. | * Handout * Book Exercise |
| **Day 4** | * Aseptic Technique and Sterile Compounding | **Laboratory:**   * Describe proper aseptic technique. * Demonstrate the steps in drawing up medication from an ampule. * Demonstrate the steps in drawing up medication from a vial. * Describe different types of intravenous (IV) parenteral medications. * Describe how to properly dispose of needles, vials, and cytotoxic supplies. | * Handout * Book Exercise |
| **Week 4** |  |  |  |
| **Day 1** | * Practical Lab | **Laboratory:**   * Proper Hand Hygiene and Aseptic Gowning | * Handout * Book Exercise |
| **Day 2** | * Practical Lab | **Laboratory:**   * Horizontal Laminar Airflow Hood * Vertical Laminar Airflow Hood | * Handout * Book Exercise |
| **Day 3** | * Practical Lab | **Laboratory:**   * Reconstitution Sterile Dry Powder Medications * Withdrawing Medications from a Vial or Glass Ampule | * Handout * Book Exercise |
| **Day 4** | * Practical Lab | **Laboratory:**   * Transferring Liquid into an IV Bag * Small volume Parental * Large Volume Parental | * Handout * Book Exercise |

**Qualitative Measure of Satisfactory Academic Progress (SAP)**

The qualitative element used to communicate Satisfactory Academic progress is the institutions published grading scale. Theory is evaluated after each unit of study. Students must maintain a cumulative theory grade average of at least 70% (C) at the end of each progress report period. Students must make up failed or missed tests and incomplete assignments. Practical skills performances are counted toward course completion. If performance does not meet satisfactory academic requirements, demonstration of the skills must be repeated until a satisfactory level of performance is achieved.

The school’s satisfactory academic progress policies must contain a Pace (quantitative) measure. The policy defines the pace at which our students must progress to ensure educational program completion within the maximum timeframe of 150%. For Florida Vocational Institute the maximum time frame is no longer than 150% of the published length of the educational programs as measured in the cumulative number of clock hours the student is required to complete.

The school uses the following grading scale:

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| **Letter** | **Number** | **Grade Point** |
| **A** | 100 - 90% | 4.0 |
| **B** | 89 - 80% | 3.0 |
| **C** | 79 - 70% | 2.0 |
| **D** | 69 - 60% | 1.0 |
| **F** | Below 60% | 0.0 |
| **I** | Incomplete | Withdraw / No Grade |

*Not Used in GPA computation: I = Incomplete; W = Withdraw; P = Pass; NP = Not Pass*

Pass - Satisfactory completion of non-graded Externship.

Fail - Unsatisfactory completion of non-graded Externship.

The students who have failed to meet the Qualitative standards are placed first on Financial Aid Warning; if no improvement over the next payment period, the student will be placed on academic suspension, with a loss of Title IV, HEA fund and they appeal the decision. Please review the appeal and probation requirements state in this policy for guidance on this process. The Director of Financial Aid in coordination with the Office of Academic Affairs monitors qualitative progress.

**Final grade calculation criteria**

Q= 20 %

CA= 10%

MT= 30%

F= 40%

FG= 100%

**Evaluation Record Code**

Q= Quizzes

CA=Class Activity

MT= Mid Term

F= Final

R= Retest

FG= Final Grade

**Attendance**

Regular attendance is required of all students. Promptness and dependability are qualities important in all occupations. Students should begin to develop these qualities and habits the day the students begin their training.

Attendance is taken daily in class by the instructor and submitted to the Registrar before the end of each class day. Students are expected to attend all scheduled class meetings and to arrive on time.  Attendance records will be maintained by the Registrar and will be part of the student’s permanent academic record.

Students with chronic absences in excess of 20% of the scheduled hours for a course will receive a failing grade for the course. Early departures and tardies will be calculated in quarter hour increments. A student will be withdrawn from any course or program if he/she does not attend within a 14 consecutive calendar day period (excluding school holidays or breaks, no longer than 5 consecutive days).  All students must complete a 100% of all externship or clinical hours within the assigned grading period.

Students are responsible for making up assignments and work missed as a result of absence at the discretion of the instructor. The instructor may assign additional outside make-up work to be completed for each absence. Students enrolled in clock hour programs will be required to attend make up classes for any missed hours scheduled by the instructor if the students has missed more than **10%** of scheduled hours.  Students enrolled in a clock hour program must attend a minimum of **85 %** of the scheduled program hours in order to graduate.

Attendance is reviewed by the instructors, program directors and the Director of Education on a weekly basis with a focus on those who have been absent for **10%** of the scheduled course hours. Students will be notified by phone, text or e-mail if their attendance is danger of violating attendance requirements.

Students may appeal the school’s actions related to the attendance policy if the absence was due to extenuating or mitigating circumstances, for example illness, military duty, death of a family member, court appearances or jury duty. The student should first discuss the issue with his or her instructor. Appeals must be received within **seven (7)** calendar days of the student being notified of the decision that he or she wishes to appeal.

Students are expected to inform faculty in advance of any pending dates where a student may be absent and should make every effort to attend the alternate class in the morning or evening. Students are only allowed to miss up to 15% of their entire program hours, anything in excess of the 15% needs to be made up and could impact the student final course grade. It is the responsibility of the student to make up work or time missed.

**MAKE –UP HOURS/TIME**

Students enrolled in clock hour programs will be required to attend make up classes for any missed clock hours scheduled if the student has missed more than 15% of scheduled hours.  Students enrolled in a clock hour program must attend a minimum of 85 % of the scheduled program hours in order to graduate. Make-up hours for class must be made up during alternative schedules, including daytime, evening or a Friday schedule. Special circumstances will be managed by the Program Director with approval from Campus Vice President.

If absence at any time during the program exceeds **more than 10%,** the student will be placed on a mandatory prescribed school schedule which may include attending Friday scheduled sessions.

**MAKE-UP CLASS WORK**

Arrangements to make-up assignments, project, test, and homework missed as a result of absence must be made with the approval of the instructor. Make-up work must be completed within ten (10) calendar days after the end of the module

**DRESS CODE**

1. While on campus and in lectures, students must wear uniform and footwear appropriate for the college learning environment. The student should demonstrate appropriate hygiene to avoid offensive odor.
2. In the student laboratory, appropriate clothing must be worn at all designated times as per the specific course syllabus. Close-toed shoes must be worn in the lab at all times.
3. During clinical rotation, the student must adhere to the dress code of the facility to which he/she is assigned. In addition to the facility’s dress code, or if the dress code is optional, the following rules apply:
   1. Students must comply with number 2 above. If the facility requires the student to wear a scrub uniform, it must be school’s uniform. The student is responsible for purchasing the correct scrub uniform. The student must wear their Student ID batch at all times.
   2. Students must not wear clothing made of denim material of any color. (No jeans or JEAN skirts, etc.)
   3. Students must not wear under t-shirts, unless they are of one color with no words, letters, slogans, graphics, etc., of any kind
   4. Students must wear closed-toe shoes (no sandals or canvas shoes) with socks or hosiery.
   5. While attending practicum rotations, student’s hair must be clean, neat and of a normal hair color. Male students must either shave regularly, or if they choose to wear a mustache and/or beard, they must keep them clean and well groomed.
   6. Before attending practicum rotation, students must bathe regularly to avoid offensive odor. In addition, students must refrain from use of cologne/perfume/aftershave lotion, or makeup.
   7. Keep fingernails clean and at a reasonable length.
   8. Students not conforming to the dress code of the facility or the program may be sent home from the practicum site at the preceptor’s or course instructor’s discretion and attendance won’t be granted.

**Cell Phones and Pagers**

No student will be called out of class for a telephone call, except in case of an emergency. It is suggested that family friends be informed of this rule. Phones will not be in used inclass.