MOBERLY AREA COMMUNITY COLLEGE
COMMON SYLLABUS
PNC 125: Medication Administration
Current Term

Instructor:
Office number:
Office hours:
Contact information:
Classroom number:
Class days and time:

Catalog Description: PNC 125: Medication Administration (1-2-2)
This course is designed to prepare the student to administer medications with concern for safety, accuracy, and attention to physiological factors. It includes basic mathematics review as it relates to dosage calculations.

Credit Hours: Didactic: 1
Lab: 2
Total: 2

Clock Hours: Theory: 16 Weeks of 1 Hour of Theory/Didactic =16 Hours
Lab: 16 Weeks of 2 Hours per Week =32 Lab Hours

Prerequisite and Co-requisites: BIO209-College Level Physiology with a lab.
Admission to the Practical Nursing Program, following PN course sequence.

Required Textbooks:
Clayton’s Basic Pharmacology for Nurses
Author: Willihnganz, Gurevitz, and Clayton
Edition: 18th
Publisher: Elsevier
ISBN: 978-0-323-55061-1

Davis’s Drug Guide for Nurses (with CD)
Author: April Hazard Vallerand and Cynthia A. Sanoski
Edition: 17th or newest
Publisher: F. A. Davis
Other required materials/facilities/equipment: MACC Nursing Skills/Sim Labs, Computer Room, DVD’s, Injection Models, Mannequins, and Medication Administration Equipment. Student will need a computer, webcam, internet at home. PowerPoints and Course Syllabus (in CANVAS or purchased at MACC Bookstore.)

Purpose of Course: This course introduces students to terminology, abbreviations, principles, guidelines, and techniques of medication administration. It includes basic mathematics review as it relates to dosage calculations for all age groups.

Course Objectives: After completion of this course the student should be able to:

1. Demonstrate positive interpersonal relationships, self-discipline, motivation, communication skills, and a professional attitude as a member of the health team when administering medications to the client.
2. Describe safe administration and guidelines in preparation of medications for all ages and backgrounds appropriate to the role as a practical nurse.
3. Recognize the importance of accountability and documentation in the administration of medications according to the nursing process.
4. Demonstrate satisfactory knowledge of basic elementary mathematics and medication calculations for safe doses.
5. Utilize conversion technique to accurately calculate medication dosages when household, apothecary, and metric system measurements are utilized.
6. Demonstrate a basic knowledge of absorption, distribution, biotransformation, and excretion of medications.
7. Demonstrate enteral, percutaneous, and parenteral routes of medication administration in the nursing skills laboratory.
8. Define terms and abbreviations used in medication administration.
9. Describe the Practical Nurse’s responsibility and techniques in administering enteral, percutaneous, and parenteral medications.
10. Apply the six rights for safety in administering medication.
11. Recognize the need for alternative considerations of medication administration to pediatric and geriatric clients as well as clients from various racial, ethical and cultural backgrounds.
12. Identify the necessary aspects of leadership strategies in managing medication administration.
13. Identify the equipment utilized for medication administration.

Course Content:

I. General Principles of Medication Administration
   A. Written Prescription
   B. Drug Label
   C. Legal Responsibility
   D. Safety Measure in Medication Administration
   E. Age Related Considerations
   F. Drug Resources
   G. Controlled Substance
   H. Standard Abbreviations
   I. Pharmacokinetics
   J. Dosage Forms
   K. Drug Names

II. Refresher Math
   A. Relative Value of a Decimal
   B. Subtraction
   C. Multiplication
   D. Division
   E. Fractions
   F. Solving an Equation
   G. Ratio
   H. Percent
   I. Proportion

III. Systems of Measurement
   A. Metric System
   B. International Unit
   C. Body Weight
   D. Body Surface Area
   E. Household Measurement
   F. Apothecary Measurement

IV. Temperature Conversion
   A. Conversion Fahrenheit to Celsius
   B. Conversion Celsius to Fahrenheit

V. Administration of Oral Medications
   A. Safety Measures for Administration
   B. Tablets
C. Capsules
D. Liquid Medication and Form
E. Sublingual
F. Buccal
G. Enteral
H. Standard Medical Abbreviations

VI. Administration of Topical Medications
A. Safety Measures for Administration
B. Topical Medications
C. Transdermal Patches

VII. Administration of Eye, Ear, Nose, and Inhaled Medications
A. Safety Measures for Administration
B. Eye Drops/Ointment
C. Ear Drops
D. Nose Drops/Sprays
E. Meter Dose Inhalers

VIII. Administration of Rectal and Vaginal Medications
A. Safety Measures for Administration
B. Rectal Medications
C. Vaginal Medications

IX. Administration of Intradermal Medications
A. Safety Measures for Administration
B. Intradermal Injections

X. Administration of Subcutaneous Medications
A. Safety Measures for Administration
B. Subcutaneous Injections

XI. Administration of Intramuscular Medications
A. Safety Measures for Administration
B. Intramuscular Injection

XII. Preparation and Administration of Medications
A. Safety Measures for Administration
B. Reconstitution of Powdered Medications
C. Vials
D. Ampules
E. Prefilled syringes

XIII. Technology Associated with Medication Administration
A. Feeding Pump
B. Insulin Pump
**Connection with Health Sciences Division-(HSD) Outcome Statement:**

In compliance with MACC’s Health Sciences Division outcomes, the student who successfully completes this course will be able to:

**Outcome I:**
Students will demonstrate effective written and oral communication skills.

- Students will be introduced to documentation of medication administration on the EMAR’s-(electronic) to use in the clinical facilities and will be evaluated on their communication with clients and peers during simulated situations in the nursing skills lab setting.

**Outcome II:**
Students will demonstrate an understanding of discipline-related math and scientific principles.

- Students will be taught how to calculate safe doses and learn to be proficient in using calculations related to nursing math for medication administration for all age groups.

**Outcome III:**
Students will think critically while systematically assessing problems, identifying issues and implementing solutions

- In the nursing skills lab setting students will perform medication administration safely using the seven rights, two identifiers, and techniques learned in class. Students will respond to varied situations in the nursing skills lab setting and will be evaluated on their responses, observations and problem-solving abilities.

**Outcome IV:**
Students will apply principles of professionalism and safety standards when entering the workforce.

- In the nursing skills lab setting students will be evaluated on their professionalism (interaction with clients and peers) and their ability to follow safety standards for medication administration. The student will demonstrate aseptic techniques for medication administration, safe handling of syringes, medication administration safety, and safe use of simulated hospital equipment.
Assessment of Student Learning:

Grading Scale:
- 92-100% = A
- 83-91% = B
- 78-82% = C
- 66-77% = D
- Below 65% = F

Grading: For further information, refer to the Practical Nursing Student Handbook. The final grade for the course will be determined by the following scale: Courses with a lab and/or clinical component:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Unit Exams (minimum of 4 major exams)</td>
<td>65%</td>
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<tr>
<td>Quizzes, homework, workbook</td>
<td>10%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Clinical and/or Lab
Clinical Grades:
- Clinical Performance Evaluations 78%
- Nursing Care Plans and Observation Experiences 78%

Clinical is graded on a pass/fail basis and must be passed to receive a grade in the course. To pass clinical, a student must have a score of “C” or 78% of the total clinical points possible in clinical performance and in written clinical assignments. Clinical performance is evaluated each week and is worth 100 points when completing client care using the “Clinical Performance Evaluation Tool.” To pass clinical performance, each student must accumulate an average score of 78% from the various performance areas. Completion of the clinical component is a requirement for successful completion of the Practical Nursing Program.

Students must pass clinical with a “C” 78% in each of the identified areas to receive a P (pass) for the clinical portion of the course. An “F” (fail) will be assigned to any clinical total below “C” 78%. Clinical grades will not be added to theory grades.

Students must receive a P (pass) in clinical in addition to “C” 78% of the points possible in the theory portion of the course to pass the nursing course. Clinical grades and theory grades are independent of one another. In case of clinical failure, the theory grade will be assigned as no credit (N/C). In case of a grade less than 78% in theory, a failing grade will be assigned and a grade of no credit (N/C) will be assigned for the clinical portion of the course.

Students must achieve a final percentage grade of a “C”/78% to successfully complete the course.
**Assessment:**
Students will attend lecture and participate in discussion. Reading chapters and content prior to class time is required. Power Points, DVD’s, guest lecturers, and other tools may be utilized for class. The exams will be provided through MACC’s online “Canvas Instructure” in a quiet environment. Exams will be timed and questions will be in a variety of formats. Homework and quizzes will be provided. The semester will conclude with a cumulative final exam.

The lab portion of this course will consist of utilizing the nursing skills/simulation lab with manikins to demonstrate medication administration skills. The student will receive nursing skills evaluations and skills performance evaluations.

**NCLEX-Style Computer Based Exam:**
At the end of this course the student will be given an NCLEX-style computer-based exam, provided by HESI (Health Education Systems, Inc.) It will include material from this course, as well as content covered in previous courses. The student will be responsible for the cost of this exam and materials per semester, and for follow-up procedures (learning material the student missed on the exam). The exam will evaluate the student’s competencies in theory and clinical, like the state board exams. Scores from this exam will be computed by using the HESI conversion score and recorded as a unit exam. Access to the exam also includes access to learning materials.

**Program Outcomes and Assessment:** The practical nursing faculty continually strives to meet the needs of the practical nursing student through program improvements. This is a cooperative effort that includes input from the faculty, students, the Practical Nursing Advisory board and other appropriate agencies or entities. Students are assessed on mastery of the course concepts and essential skills throughout the courses of the Practical Nursing Program. Other program performance criteria are obtaining skills mastery, clinical performance evaluations, NCLEX-PN testing, successful licensure, placement rates, follow-up surveys, and approval by the Missouri State Board of Nursing.

**Expected Study Time Commitments:**
Students should expect to spend approximately 2 to 4 hours per week studying, reading, and working on assignments for each registered credit hour. For example, 6 to 12 study hours per week may be expected for a 3-credit hour class.

**Description of Assignments:**
Available on course schedule and is subject to changes and additions.

**INSTRUCTOR POLICIES:**

**Tardiness, make-up, and late work:**

**Extra-credit work:**
Schedule of Student Assignments/Activities:
There will be a calendar provided with chapters to be covered in lecture. Reading ahead is strongly encouraged. All other assignments are provided on the enclosed calendar for the course and are subject to change. Notice will be provided to students for any changes. This notice will be in the form of Canvas messaging/announcements and verbally within the classroom setting.

COLLEGE POLICIES:

Attendance:

Students are expected to attend all class sessions for which they are enrolled. The College reserves the right to drop or withdraw students from courses due to lack of attendance.

Students need to be aware that dropping/being dropped from a course and their last date of attendance in the course may impact their financial aid.

MACC faculty are required to track attendance and report lack of attendance. An instructor must complete the appropriate steps to drop a student within one week following the student’s violation of the attendance policy. Additionally, a student’s attendance rate will be calculated based upon the first day the academic session begins (not the student’s date of enrollment in the course). If a student does not attend a course as defined below, the student will be dropped as “Never Attended.”

Term Length Drop Calculations

16-week: Any student who misses two (2) consecutive weeks of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.

8-week: Any student who misses one (1) consecutive week of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.

4-week: Any student who misses two (2) consecutive days of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.

Intersession: Any student who misses one (1) day of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.
Acceptable justification may include, but is not limited to, family emergencies, illness or injury, college-approved co-curricular and extra-curricular activities, and religious holidays.

**Definition of Course Attendance**

<table>
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<tr>
<th>Course Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>In Seat</td>
<td>Physically attending scheduled, face-to-face, class meetings</td>
</tr>
<tr>
<td>Virtual</td>
<td>Being present, via appropriate platform, for scheduled class meetings/activities</td>
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| Hybrid      | Physically attending scheduled, face-to-face, class meetings and active participation in the online portion of the course which may include any or all of the following:  
  - Completion of quizzes or exams during class meetings and online  
  - Submission of assignments during class meetings and online  
  - Participation in discussions during class meetings and online |
| Online      | Active participation in an online course includes the following:  
  - Completion of quizzes or exams  
  - Submission of assignments  
  - Participation in threaded discussions |

Simply logging into the Learning Management System (Canvas) and/or accessing the course and course related material does not constitute active participation for the online component of hybrid courses or for online courses. (*Policy Handbook*, I.090 & M.095)

**Academic Dishonesty:**
MACC board policy is as follows: “Academic dishonesty by student’s damages institutional credibility and unfairly jeopardizes honest students; therefore, it will not be tolerated in any form.” Forms of academic dishonesty include but are not limited to the following: violations of copyright law, plagiarism, fabrication, cheating, collusion, and other academic misconduct. Incidents of dishonesty regarding assignments, examinations, classroom/laboratory activities, and/or the submission of misleading or false information to the College will be treated seriously. The procedure for handling academic dishonesty is outlined in the Student Handbook (*Policy Handbook M.010*). In cases of alleged academic dishonesty, the burden of proof is on the student, not on the instructor.

**Student Email:**
MACC mail is the official student email system at MACC. Official college communication is sent via this email system. Students are responsible for checking their MACC Mail account regularly. Students may also receive notifications and reminders from MACC through the online learning platform. However, students should remain
aware that the online learning platform messaging system and MACC Mail (student email) system are two separate systems.

**Americans with Disabilities Act-ADA Statement**
Students who have disabilities that qualify under the Americans with Disabilities Act may register for assistance through the Office of Access and ADA Services. Students are invited to contact the Access/ADA Office to confidentially discuss disability information, academic accommodations, appropriate documentation, and procedures. For more information, please call either the Moberly office at (660) 263-4100, ext. 11240 or the Columbia office at (573) 234-1067, ext. 12120, or visit our web page at [http://www.macc.edu/index.php/services/access-office](http://www.macc.edu/index.php/services/access-office).

**Title IX Statement**
MACC maintains a strict policy prohibiting sexual misconduct in any form, including sexual harassment, sexual discrimination, and sexual violence. All MACC employees, including faculty members, are considered mandated reporters of sexual misconduct and as such are expected to contact the Title IX Coordinator when they become aware, in conversation or in writing, of an incident of sexual misconduct. For more information on this policy or to learn about support resources, please see [http://www.macc.edu/sexual-misconduct-policy](http://www.macc.edu/sexual-misconduct-policy) or contact Cheryl Lybarger, MACC’s Title IX Coordinator, at 660-263-4110, ext. 11369 or cheryll@macc.edu.