UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

SUMMER 2017

COURSE NUMBER NUR 3123 Section 7E19, 7060 & 73C8

COURSE TITLE Pathophysiology and Pharmacology

CREDITS 4

PLACEMENT RN/BSN Program: RN to BSN Track

PREREQUISITES Admission to RN-BSN Track

COREQUISITES None

FACULTY OFFICE PHONE OFFICE HOURS

David J Derrico RN, MSN, CNE HPNP 352-273-6341 Friday 0800-1000

Clinical Assistant Professor 3202 (cell) 352-562-6305 & by appointment

# [derridj@ufl.edu](mailto:derridj@ufl.edu)

Jacqui Hoffman, DNP, ARNP, NNP-BC HPNP (cell) 727-709-9211 Monday 1000-1200

Visiting Assistant Professor 2225 & by appointment

[hoffmanjm@ufl.edu](mailto:hoffmanjm@ufl.edu)

COURSE DESCRIPTION This course is designed to improve the learner’s ability to understand cellular physiology and alterations in structure and function resulting from the action of stressors on the human body at the cellular level. Physiological, pathophysiological, psychobiological, and pharmacological concepts are examined that provide a foundation for understanding the pathophysiology of disease and the rationale for treatment including pharmacologic therapy that serve as a basis for critical thinking and decision making in the planning and managing of care for individuals across the life span are examined.

COURSE OBJECTIVES Upon completion of this course, the student will be able to:

1. Utilize principles from the biological and behavioral sciences to understand pathophysiological and psychobiological processes across the lifespan.
2. Explain relationships among pathophysiological processes, laboratory and diagnostic tests, and clinical manifestations of selected illnesses and the pharmacological treatment.

3. Identify genetic factors that influence pathophysiological and psychobiological processes in diverse clients.

4. Distinguish differences between developmental physiological alterations and pathophysiological processes.

5. Explain psychobiological processes associated with functional alterations in client’s behavior.

1. Explain the rationale for pharmacological therapies related to the physiological, pathophysiological and/or psychobiological processes occurring in the individual.

COURSE SCHEDULE

E-Learning in Canvas is the course management system that you will use for this course. E-Learning in Canvas is accessed by using your Gatorlink account name and password at <http://elearning.ufl.edu> . There are several tutorials and student help links on the E-Learning login site. If you have technical questions call the UF Computer Help Desk at 352-392-HELP or send email to [helpdesk@ufl.edu](mailto:helpdesk@ufl.edu).

It is important that you regularly check your Gatorlink account email for College and University wide information and the course E-Learning site for announcements and notifications.

Course websites are generally made available on the Friday before the first day of classes.

TOPICAL OUTLINE

1. Cellular metabolism and genetic basis of health
2. Fluid and electrolytes
3. Acid/base balance
4. Alterations in physiological systems
5. Hematopoietic system
6. Immune system
7. Cellular proliferation
8. Circulatory system
9. Pulmonary system
10. Digestive system
11. Endocrine system
12. Renal system
13. Reproductive systems
14. Neurological system
15. Musculoskeletal system
16. Integumentary system
17. Alterations in cognition, perception and affect

TEACHING METHODS

Lecture, audiovisual materials, written materials, and presentation of case studies.

LEARNING ACTIVITIES

Readings, worksheets, discussions, case study analysis, and study questions.

EVALUATION METHODS/COURSE GRADE CALCULATION

Exam 1 16%

Exam 2 16%

Exam 3 16%

Quizzes 28%

(Pathophysiology 10% & Pharmacology 18% - Note Quizzes are due Sundays @ 2359 weekly)

Discussion Board 6%

Case Study 18%

Total 100%

*Feedback on all graded assignments routinely is given within 10 working days of the due date.*

MAKE UP POLICY

Make-up exams/assignments will be arranged for university excused absences only. Contact David Derrico at [derridj@ufl.edu](mailto:derridj@ufl.edu) as soon as possible to arrange. Unexcused late work will receive a 10% grade deduction for each day for a maximum of 3 days. University policies can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

GRADING SCALE/QUALITY POINTS

A 95-100 (4.0) C 74-79\* (2.0)

A- 93-94 (3.67) C- 72-73 (1.67)

B+ 91- 92 (3.33) D+ 70-71 (1.33)

B 84-90 (3.0) D 64-69 (1.0)

B- 82-83 (2.67) D- 62-63 (0.67)

C+ 80-81 (2.33) E 61 or below (0.0) \* 74 is the minimal passing grade

For more information on grades and grading policies, please refer to University’s grading policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

PROFESSIONAL BEHAVIOR

The College of Nursing expects all Nursing students to be professional in their interactions with patients, colleagues, faculty, and staff and to exhibit caring and compassionate attitudes. These and other qualities will be evaluated during patient contacts and in other relevant settings by both faculty and peers. Behavior of a Nursing student reflects on the student's individual’s ability to become a competent professional Nurse. Attitudes or behaviors inconsistent with compassionate care; refusal by, or inability of, the student to participate constructively in learning or patient care; derogatory attitudes or inappropriate behaviors directed at patients, peers, faculty or staff; misuse of written or electronic patient records (e.g., accession of patient information without valid reason); substance abuse; failure to disclose pertinent information on a criminal background check; or other unprofessional conduct can be grounds for disciplinary measures including dismissal.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT

Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>. Students are required to provide their own privacy screen for all examinations administered to student laptops. No wireless keyboards or wireless mouse/tracking device will be permitted during examinations.

University and College of Nursing Policies:

Please see the College of Nursing website for a full explanation of each of the following policies - <http://nursing.ufl.edu/students/student-policies-and-handbooks/course-policies/>.

Attendance

UF Grading Policy

Accommodations due to Disability

Religious Holidays

Counseling and Mental Health Services

Student Handbook

Faculty Evaluations

Student Use of Social Media

REQUIRED TEXTBOOKS

Burchum, J. R., & Rosenthal, L. D. (2016). *Lehne's pharmacology for nursing care* (9th ed.).

St. Louis, MO: Elsevier Saunders.

The accompanying online course through Elsevier Evolve is also REQUIRED.

The Online Course is*: Lehne's Pharmacology Online for Pharmacology for Nursing Care*, 9th Edition

**COURSE ID: 153999\_dderrico\_1005 INSTRUCTOR: David Derrico**

You can purchase access to this separately or in combination with your textbook from the following website: <https://evolve.elsevier.com/cs/store?role=student>

McCance, K.L., & Huether, S. E. (2014). *Pathophysiology*: *The biologic basis for disease in*

*adults and children* (7th ed.). St. Louis: Mosby/Elsevier.

WEEKLY CLASS SCHEDULE

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| **DATE** | **PATHOPHYSIOLOGY**  **TOPIC/EVALUATION** | **PATHOPHYSIOLOGY**  **ASSIGNMENTS/READINGS** | **PHARMACOLOGY**  **TOPIC/EVALUATION** | **PHARMACOLOGY**  **ASSIGNMENTS/READINGS** |
| **Week 1**  May 8-14 | Introduction, Cellular Metabolism, Stress | McCance: pp. 25-28, Chapters 2, 7, 11, 16, & pp. 1668-1679.  **Syll. Quiz Due 5/14, 11:59pm**  **Quiz #1 Due by 5/14, 11:59pm** | Introduction | Burchum (B):  Unit 1 - Ch. 1, 2, 3  Evolve (E): Unit 1  Canvas (C): Lecture  **Pharmacology Discussion #1 Due by 5/14, 11:59 pm (post to other students by 5/17, 11:59 pm)** |
| **Week 2**  May 15-21 | Fluids & Electrolytes  Acids & Bases | McCance: Chapter 3  **Quiz #2 Due by 5/21, 11:59pm** | Basic Principles of Pharmacology   * Pharmacokinetics * Pharmacodynamics | B: Unit II (Ch. 4, 5)  E: Unit II  C: Lecture  **Pharmacology Quiz #1 Due by 5/21, 11:59 pm** |
| **Week 3**  May 22-28 | Hematopoietic System | McCance: Chapters 27, 28, 29 & pp. 1063-1068  **Quiz #3 Due by 5/28, 11:59pm** | Basic Principles of Pharmacology   * Drug Interactions * Adverse Reactions * Medication Errors * Individual Drug Responses | B: Unit II (Ch. 6, 7, 8)  E: Unit II  C: Lecture  **Pharmacology Quiz #2 Due by 5/28, 11:59pm** |
| **Week 4**  May 29-June 4 | Immune System  **Exam 1: Proctor U**  **May 30 or 31** | McCance: Chapters 7, 8, 9, & 10  **Quiz #4 Due by 6/4, 11:59pm** | Antiinflammatory, Antiallergic, and Immunologic Drugs | B: Unit XI (Ch. 67, 68, 69, 70, 71, 72)  E: Unit XI  C: Lecture |
| **Week 5**  June 5-11 | Cancer | McCance: Chapters 12, 13, & pp. 1013-1035  **Quiz #5 Due by 6/11, 11:59pm** | Cancer Chemotherapy | B: Unit XVIII (Ch. 101, 102, 103)  E: Unit XVIII  C: Lecture |
| **Week 6**  June 12-18 | Pulmonary System | McCance: Chapters 34, 35, &  pp. 1310-1312  **Quiz #6 Due by 6/18, 11:59pm** | Respiratory Tract Drugs | B: Unit XIII (Ch. 76, 77)  E: Unit XIII  C: Lecture  **Pharmacology Quiz #3 Due by 6/18, 11:59pm** |
| June 19-25 | Summer Break | | | |
| **Week 7**  June 26-July 2 | Cardiovascular System | McCance: Chapters 31 & 32  **Quiz #7 Due by 7/2, 11:59pm** | Drugs that Affect the Heart, Blood Vessels, and Blood | B: Unit VII (Ch. 43, 44, 45, 46, 47)  E: Unit VII  C: Lecture  **Pharmacology Discussion #2 Due by 7/2, 11:59 pm**  **(post to other students by 7/5, 11:59 pm)** |
| **Week 8**  July 3-9 | Urinary, Renal, & Reproductive Systems  **Exam 2: Proctor U**  **July 5 or July 6** | McCance: Chapters 37, 38, &  pp. 850-871  **Quiz #8 Due by 7/9, 11:59pm** | Chemotherapy of Infectious Diseases | B: Unit XVI (Ch. 83); Recommend Review Chapters: 84-96  E: Unit XVI  C: Lecture  **Pharmacology Quiz #4 Due to 7/9, 11:59 pm** |
| **Week 9**  July 10-16 | Gastrointestinal System | McCance: Chapters 40 & 41  **Quiz #9 Due by 7/16, 11:59pm** | Gastrointestinal Drugs | B: Unit XIV (Ch. 78, 79, 80)  E: Unit XIV  C: Lecture  **Pharmacology Quiz #5 Due by 7/16, 11:59pm** |
| **Week 10**  July 17-23 | Endocrine System  Musculoskeletal System | McCance: Chapter 22, 43, & 44  **Quiz #10 Due 7/23, 11:59pm** | Drugs for Endocrine Disorders | B: Unit VIII (Ch. 57, 58, 59, 60)  E: Unit VIII  C: Lecture  **Pharmacology Discussion #3 Due by 7/23, 11:59 pm**  **(post to other students by 7/26, 11:59 pm)** |
| **Week 11**  July 24-30 | Neurologic System  ***Case Study:***  ***Due July 27, 2359PM*** | McCance: Chapters 17 & 18  **Quiz #11 Due 7/30, 11:59pm** | * Drug Therapy Across the Life Span * Peripheral Nervous System Drugs * Central Nervous System Drugs | B: Unit III (Ch. 9, 10, 11)  Unit IV (Ch. 12, 13)  Unit V (Ch. 20)  E: Unit III  Unit IV  Unit V  C: Lecture  **Quiz #6 Due by 7/30, 11:59pm** |
| **Week 12**  July 31-August 4 | **Exam 3: Proctor U**  **July 31 or August 1** |  |  |  |

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| Approved: | Academic Affairs Committee:  General Faculty:  UF Curriculum Committee: | 07/14  07/14  10/14 |