UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

SUMMER 2015

COURSE NUMBER NUR 3123 Section 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 HPNP 352-273-6341 Friday 0800-1000

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

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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.

1. Explain psychobiological processes associated with functional alterations in client’s behavior.
2. 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://lss.at.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, case study analysis, and study questions.

EVALUATION METHODS/COURSE GRADE CALCULATION

Exam 1 18%

Exam 2 18%

Exam 3 18%

Quizzes 28%

(Pathophysiology 10% and Pharmacology 18% - Note Quizzes are due Sundays at 2359 each week)

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 that 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>

REQUIRED RESOURCE

Proctor U will be utilized in this course for the administration of examinations. Students will be instructed by faculty on how to access and pay for this required resource.

REQUIRED TEXTBOOKS

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

St. Louis: Saunders/Elsevier

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

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

The accompanying online course through Elsevier Evolve for:

*Lehne’s Pharmacology for nursing care* (9th ed.) is also REQUIRED. You can purchase access to this separately or in combination with your text book.

The ISBNs are as follows:

*Lehne’s Pharmacology for nursing care* (9th ed.) - ISBN-13: 978-0323321907

Online course Access Card only -ISBN-13: 978-0323355599

Both - ISBN-13: 978-0323371315

WEEKLY CLASS SCHEDULE

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| DATE | TOPIC/EVALUATION | ASSIGNMENTS/READINGS |
| Week 1  May 11-15 | Introduction, Cellular Metabolism, Stress | McCance: pp. 25-28, Chapters 2, 7, 11, 16, & pp. 1668-1679.  Burchum: Chapters 1 &2 |
| Week 2  May 18-22 | Fluids & Electrolytes  Acids & Bases | McCance: Chapter 3  Burchum: Chapter 3 |
| Week 3  May 26-29 | Hematopoietic System | McCance:Chapters 27, 28, 29 & pp. 1063-1068  Burchum: Chapter 4 |
| Week 4  June 1-5 | Immune System  **Exam 1** | McCance: Chapters 7, 8, 9, & 10 |
| Week 5  June 8-12 | Cancer | McCance: Chapters 12, 13, & pp. 1013-1035  Burchum: Chapter 5 |
| Week 6  June 15-19 | Pulmonary System | McCance: Chapters 34, 35, &  pp. 1310-1312 |
| June 22-26 | Summer Break |  |
| Week 7  June 29-July 2 | Cardiovascular System | McCance: Chapters 31 & 32  Burchum: Chapter 6 |
| Week 8  July 6-10 | Urinary, Renal, & Reproductive Systems  **Exam 2** | McCance: Chapters 37, 38, &  pp. 850-871 |
| Week 9  July 13-17 | Gastrointestinal System | McCance: Chapters 40 & 41  Burchum: Chapter 7 |
| Week 10  July 20-24 | Endocrine System  Musculoskeletal System | McCance: Chapter 22, 43, & 44  Burchum: Chapter 8 |
| Week 11  July 27-31 | Neurologic System  ***Case Study is due*** | McCance: Chapters 17 & 18  Burchum: Chapters 9-11 (11pgs) |
| Week 12  August 3-6 | **Final Exam** |  |

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

Academic Honesty

UF Grading Policy

Accommodations due to Disability

Religious Holidays

Counseling and Mental Health Services

Student Handbook

Faculty Evaluations

Student Use of Social Media

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