UNIVERSITY OF FLORIDA

COLLEGE OF NURSING

COURSE SYLLABUS

Fall 2022

COURSE NUMBER NUR 3196

COURSE TITLE Pathophysiology/Pharmacology in Nursing 1

CREDITS 04

PREREQUISITES Admission to the Nursing Program

COREQUISITES None

FACULTY Anne C. Dillard, DNP, RN, AGCNS, CNE

Clinical Assistant Professor

Office: HPNP 3231

Office Phone: (352) 273-6366

Office hours\*: Wednesday 3-5 PM and by appointment

Email: [acdillard@ufl.edu](mailto:acdillard@ufl.edu)

Jennifer Dungan, PhD, MSN, RN

Associate Professor

Office HPNP 3229

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Anita Stephen, PhD, RN, CNL

Clinical Assistant Professor

Director of Simulation

Office: HPNP 3240

Office Phone: (352) 273-6328

Office hours: Thursday 1p-3p & by appointment

Email: [astephen@ufl.edu](mailto:astephen@ufl.edu)

\*Faculty are generally available to meet with students (in the office or virtually) as listed above. Due to professional travel and other unavoidable obligations, faculty may not be present every week without notice. It is advisable that students confirm availability or make an appointment in advance.

COURSE DESCRIPTION This course is part one of a two semester sequence for pre-licensure students examining pathophysiology and pharmacology of human illness in diverse groups of individuals across the lifespan. Emphasis is on alterations in homeostatic mechanisms and underlying bases for disease risk/manifestations. Corresponding pharmacokinetics, pharmacodynamics and pharmacogenetic principles will be included.

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

1. Utilize principles from the genetic and biobehavioral sciences to explain the relationship between pathophysiological processes, diagnostic tests, and clinical manifestations and corresponding pharmacotherapeutics of selected alterations.
2. Distinguish differences between developmental physiological alterations and pathophysiological processes.
3. Interpret the general principles of pharmacotherapeutics, pharmacokinetics, pharmacodynamics, and pharmacogenetics/genomics in wellness promotion and illness prevention and treatment.
4. Apply the principles of the safe medication management process identifying the responsibilities and standards of care for the professional nurse.
5. Differentiate factors such as age, developmental level, psychosocial, cultural, environmental, and genetic considerations and how these may affect an individual’s physiologic response.
6. Apply legal, ethical, and cultural parameters of medication teaching, administration and adherence

COURSE SCHEDULE

Faculty Section Day Time Room

Dillard 3F17 Thursday 8:30-12:35 pm G312

Stephen 3F19 Thursday 7:25am-11:30 am G114

Dungan 3F20 Thursday 8:30am-12:35 pm 1404

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.

TEACHING METHODS

Canvas Videos

Collaborative Activities

Simulated Clinical Practice

Interactive Learning Platforms

Lecture/discussion

Exams/Quizzes

LEARNING ACTIVITIES

Pre-class Activities/Quizzes

Canvas Learning Bursts

Reading Assignments

TopHat

CLIC Math: Dosage Calc 360

Small group activities

Class discussion

**\*NOTE: Course content is subject to change to facilitate learning.**

EVALUATION METHODS/COURSE GRADE CALCULATION

|  |  |
| --- | --- |
| Exam 1 | 18% |
| Exam 2 | 18% |
| Exam 3 | 18% |
| Final Exam | 18% |
| CLIC Math: Dosage Calc 360  (includes Canvas quizzes, midterm and final assessments and DC 360 assignments) | 10% |
| Partners in Patho Quizzes/Assignments | % 8% |
| Class Participation (Tophat, Adaptive Quizzing, and other assignments) | %  10% |
| Total | 100% |

An online proctoring service will be used allowing testing offsite. Tests occur during scheduled class times. Students are required to have a working webcam, and a stable Internet connection using Google Chrome. On the day of testing you will be instructed to download a testing extension via email. An authentication process will include a picture of yourself, UF ID, and scanning the room. Computer camera must show all of your face during testing or the exam will be considered invalid. No screenshots of the exam or documentation of exam questions will be allowed. All testing is based on honor code, Students found breaching the honor code will be dismissed from the UF College of Nursing and possibly the University of Florida.

*Course Average:*

Students must earn an average of 74% on each component of the course (exams and assignments) to pass the course. No final course grades will be rounded.

CLASS ATTENDANCE AND MAKE UP POLICY

Collaborative learning is an essential component of this course; therefore, attendance is expected at all scheduled classes. Advanced notice of absence is expected. In general, acceptable reasons for absence from or failure to participate in class include illness, serious family emergencies, special curricular requirements (e.g., professional conferences **with advanced notice and approval**), military obligation, severe weather conditions, religious holidays, and participation in official university activities. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) are excused. If the student does not attend class, the class participation points may not be awarded. You must be present in class to receive these points. Makeup assignments for excused absences will be planned with the instructor, at the instructor’s discretion. **If at all possible**, the course instructor must be notified in advance if an exam is missed due to an extenuating circumstance. If no notice is given or without prior approval of an absence for a reason listed above, a grade of zero may be assigned. Students may not opt out of any exams.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

LATE ASSIGNMENTS

Students are expected to plan in advance and submit assignments by posted due dates. Students may receive a zero on a late assignment. Late assignments may not be accepted. Accommodations will only be provided for excused absences.

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>

COURSE EVALUATION

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

ACCOMMODATIONS DUE TO DISABILITY

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/> ) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

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.

Your course faculty believe that everyone participating in activities in this class is intelligent, capable, cares about doing their best, and wants to improve. We are committed to acknowledging each person’s best intentions and their capacity for change. We recognize that our lived experiences inform the lens of our interpretations and reactions to events, and therefore believe there is no blame, no shame as we explore our unconscious biases and behaviors. We are committed to seeing each other as individuals and not just our social identities, and therefore believe each person speaks as individuals; we don’t expect anyone to speak for nor represent a particular group. (Davis, 2020)

INCLUSIVE LEARNING ENVIRONMENT

We strive to provide an inclusive learning environment as we prepare graduates who care, lead, and inspire. As we share our nursing values and personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels they belong to the College of Nursing community. <https://nursing.ufl.edu/wordpress/files/2022/08/BSN_DNP-Handbook-Jul-28-2022.pdf>

CIVILITY STATEMENT

Civility among all individuals in the CON (faculty, staff and students) is vital for an inclusive environment that fosters personal reflection, growth and a collective harmony. <https://nursing.ufl.edu/wordpress/files/2022/08/BSN_DNP-Handbook-Jul-28-2022.pdf>

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 <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> . Students are required to provide their own privacy screen for all examination’s 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 student policies (<http://students.nursing.ufl.edu/currently-enrolled/student-policies-and-handbooks/>)

PRIVACY POLICIES/ ELECTRONIC RESOURCES

Below are links to the privacy policies associated with *possible* corporate electronic resources used in our course.

Elsevier <https://www.elsevier.com/legal/privacy-policy>

Top Hat <https://tophat.com/company/legal/privacy-policy/>

REQUIRED TEXTBOOKS

Ackley, B., Ladwig, G. & Makic, M. (2019). *Nursing diagnosis handbook. An evidence-based guide to planning care (12th Ed.).* Elsevier.

McCuistion, L., & DiMaggio, K., Winton, M., Yeager, J. (2021). *Pharmacology: A Patient- Centered Nursing Process Approach, (11th Ed).* Elsevier

Heuther, S., McCance, K., Brashers, V. & Rote, N. (2020). *Understanding pathophysiology (7th*  *Ed.).* Elsevier.

Martinez de Castillo, S. & Werner-McCullough, M. (2019). *Dosage Calculations 360* (e-text resource). FA Davis.

WEEKLY CLASS SCHEDULE

**\*NOTE: Course content or clinical scheduling is subject to change to facilitate learning.**

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| --- | --- | --- | --- | --- |
| **Week #** | **Module #** | **Thursday classes**  Dates/Times | Topic  **Refer to Canvas modules for all assignments**  **Weekly math assignments due at DC 360 online** | Course Objectives  Program Outcomes |
| **1** | 1 | 8/25 | Introduction to pharmacology  Dosage Calc 360- no assignments | 3,4,5 (1,3,4) |
| **2** | 2 | 9/1 | Safety, Quality, and Drug Administration  Dosage Calc 360 – assignment due: Basic math/Syringes and Needles | 1,3,4,5, 6 (1,3,4) |
|  |  | 9/6 | Labor Day-Monday (no classes) |  |
| **3** | 3 | 9/8 | Stress  Cholinergics  Adrenergics  Dosage Calc 360 – Quiz in class.  Assignments due:  Safety in medication administration/Systems of measurement  Module 2 and 3 review | 1,2,3,4,5,6 (1,3,4) |
| **4** | 4 | 9/15 | Fluids and Electrolytes  Dosage Calc 360 – Assignment due: Calculating Intake and Output | 1,3,4 (1,3,4) |
| **5** | 5 | 9/22 | Renal  Dosage Calc 360 – Quiz in class  Assignment due: Calculating oral medication doses | 1,2,3,4,5,6 (1,3,4) |
| **6** | 6 | 9/29 | **Exam 1** Modules 1 – 5  Asynchronous lesson - Acid Base review | 1,2,3,4,5,6 (1,3,4) |
| **7** | 7 | 10/6 | Diabetes Mellitus  Dosage Calc 360 – Assignment due: Administering Insulin | 1,2,3,4,5,6 (1,3,4) |
| **8** | 8 | 10/13 | Coagulation  Hematopoietics  Inflammation and ImmunityDosage Calc 360 – Modules 2-8 Midterm Quiz in class  Assignments due: Linear Ration and Proportion  Module 4-8 review | 1,2,3,4,5,6 (1,3,4) |
| **9** | 9 | 10/20 | Exam 2 Modules 6 - 8  Asynchronous lesson – Human Immunodeficiency Virus | 1,2,3,4,5 (1,3,4) |
| **10** | 10 | 10/27 | Pain  Complementary and Alternative Therapies  Vitamins and Minerals  Nutritional Support  Dosage Calc 360 Assignment due: Fractional Ratio and Proportion | 1,2,3,4,5 (1,3,4) |
| **11** | 11 | 11/3 | Respiratory  Dosage Calc 360 – Quiz in class  Assignment due: Dimensional Analysis | 1,3,4,5,6 (1,3,4) |
| **12** | 12 | 11/10 | Cardiovascular  Drug Therapy for Older Adults  Dosage Calc 360 - Final in class (comprehensive) quiz  Assignment due: Formula Method, modules10-12 review | 1,2,3,4,5 (1,3,4) |
|  |  | 11/11 | Veteran’s Day- (No classes) |  |
| **13** | 13 | 11/17 | Exam 3 Modules 9-12  Asynchronous lesson – COVID 19 | 1,2,3,4,5(1,3,4) |
|  |  | 11/23 – 11/27 | Thanksgiving Break |  |
|  |  | 12/1  LAST DAY of class | Infections |  |
|  |  | 12/8 and 12/9 | UF Reading days |  |
|  |  | 12/15 2022 | Comprehensive Final Exam |  |

BSN Program Outcomes:

1. Apply critical thinking to synthesize knowledge grounded in liberal education and nursing, in the practice of professional nursing in the global community.
2. Collaborate with the healthcare team and clients to provide safe and cost-effective high-quality health care.
3. Integrate evidence-based findings in decision-making in the practice of professional nursing.
4. Appraise current evidence to evaluate health care safety and quality improvement initiatives for individuals and groups.
5. Analyze information from health care technology systems to apply evidence that will guide nursing practice.
6. Utilize knowledge of health care regulation to advocate for policy change to improve health care systems and professional nursing practice.
7. Illustrate the importance of advocacy in the improvements in nursing practice and throughout the healthcare system.
8. Demonstrate professional communication, collaboration and documentation with healthcare teams to support improvement in patient health outcomes.
9. Utilize health promotion, health maintenance, and disease prevention strategies across settings to improve the health of diverse individuals and populations across the lifespan.
10. Demonstrate professional competence and values reflective of professional nursing standards and mutual respect within a global society.

11. Build therapeutic alliance with patients and families to provide personalized care.

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| Approved: |  | Academic Affairs Committee:  General Faculty:  UF Curriculum Committee: | 12/17  12/17  01/18 |