



INSTRUCTIONAL PACKAGE

PNR 121

Fundamentals of Pharmacology

Effective Term

Fall 2025/Spring 2026/Summer 2026

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Fall 2025/Spring 2026/Summer 2026

COURSE PREFIX: PNR 121 COURSE TITLE: Fundamentals of Pharmacology

CONTACT HOURS: 2.0 CREDIT HOURS: 2.0

RATIONALE FOR THE COURSE:

This is an introductory course on the concepts of pharmacology and medication administration. Emphasis is on calculation of dosages, administration of medications, and correct use of abbreviations. Effects of specific drugs are presented.

COURSE DESCRIPTION:

This course is an introduction to basic concepts of pharmacology. Dosage calculations, medication administration, and common drug classifications are among the concepts explored.

PREREQUISITES/CO-REQUISITES:

Acceptance to the Practical Nursing Program

Co-requisites PNR 110, MAT 155 and BIO 210

(Please note: Progression to PNR 120 is contingent upon previous successful completion within the specified time specified by the current HGTC college catalog, or current enrollment in these courses)

*Online/Hybrid courses require students to complete the DLI Orientation Video prior to enrolling in an online course.

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

HGTC Student Picture ID Badge, Simple calculator.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.

Access to myHGTC portal for student self-services.

College email access – this is the college's primary official form of communication.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to complete identity verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

Part II: Student Learning Outcomes**COURSE LEARNING OUTCOMES and ASSESSMENTS*:****Module 1 Learning Objectives**

Chapters Covered: 1,2,3,4,5,6,12,13,14,15,16,17,18,19

Basic Pharmacology for Nursing 19th edition Willihnganz

Kaplan: PN Basics Text/E-Book; Pathway to success videos; orientation videos; question trainers; essential nursing content videos; SCLR Website; NCSBN Website.

1. Understand drug definitions, standards, and information sources.
2. Identify basics of drug actions and interactions.
3. Discuss the effects of age and gender and ethnicity on drug absorption, distribution, metabolism, and excretion.
4. Discuss how the nursing process applies to pharmacology.
5. Describe the role of the nurse in patient and family education in relationship to prescribed medications.
6. Identify the legal and ethical considerations for medication administration.
7. Identify precautions used to ensure the right drug is prepared and given to the right patient.
8. List the seven rights of drug administration.
9. Identify and discuss various methods of medication administration including:
10. Percutaneous, Enteral, & Parenteral methods.
11. Identify and understand the mechanism of action, side effects and nursing management for drugs prescribed for: The autonomic and central nervous systems, sleep, neurodegenerative, mental health, seizure disorders & pain management.
12. Explain how drugs inhibit the actions of cholinergic and adrenergic fibers.

13. Review the actions/uses/adverse effects of adrenergic, cholinergic agents, and anticholinergic agents.
14. Cite nursing interventions that can be implemented as an alternative to administering sedative-hypnotic medication.
15. Identify the antidote drug used for the management of benzodiazepine overdose.
16. Describe the expectations of the medications that are prescribed for the treatment of Parkinson's disease.
17. Explain the actions of the agents used in the treatment of Alzheimer's disease.
18. Cite the drug therapy used to treat anxiety disorders.
19. Identify adverse effects that may result from drug therapy used to treat anxiety.
20. Compare the mechanism of action of SSRIs with that of other antidepressant agents.
21. Cite the adverse effects of MAOIs, SNRIs, TCAs, and lithium.
22. Discuss the antipsychotic medications that are used for the treatment of psychoses.
23. Identify the drug classes used to treat seizure disorders.
24. Differentiate among the properties of opiate agonists, partial agonists and opiate antagonists.
25. Describe the pharmacological effects of salicylates.

Module 2 Learning Objectives

Chapters Covered: 21,22,23,24,25,26,27,28,29,30

Basic Pharmacology for Nursing 19th edition Willihnganz

Kaplan: PN Basics Text/E-Book; Pathway to success videos; orientation videos; question trainers; essential nursing content videos; SCLLR Website; NCSBN Website.

1. Identify and understand the mechanism of action, side effects and nursing management for drugs prescribed for: The cardiovascular system.
2. Identify the major risk factors for the development of metabolic syndrome.
3. Explain the treatment goals for type 2 diabetes management, lipid management, and hypertension management.
4. Discuss the drug management of the underlying diseases in patients with metabolic syndrome.
5. Discuss the primary approaches to treat lipid disorders.
6. Identify the classification of drugs used to treat dysrhythmias.
7. Cite common adverse effects that may be observed with the administration of antidysrhythmic drugs.
8. Describe the actions of the drug classifications used to treat angina pectoris.
9. Identify the systemic effects to expect when peripheral vasodilating agents are administered.
10. Explain the primary purposes of anticoagulant therapy.

11. Identify the actions of platelet inhibitors, anticoagulants, thrombin inhibitors, and fibrinolytic agents and the procedures to detect hemorrhage.
12. Identify the primary actions on heart failure of digoxin, angiotensin-converting enzyme inhibitors, angiotensin receptor blockers, and beta blockers.
13. Describe digoxin toxicity and ways to prevent it.
14. Describe the actions of diuretics and their effects on blood pressure and electrolytes.
15. Discuss the rationale for administering diuretics cautiously in the older population.
16. Identify and understand the mechanism of action, side effects and nursing management for drugs prescribed for: The respiratory system.
17. Explain the major actions of sympathomimetic, antihistaminic, and corticosteroid decongestants.
18. Distinguish the mechanisms of action of expectorants, antitussives, and mucolytic agents.
19. Discuss therapeutic effects and adverse effects for beta-adrenergic bronchodilator and anticholinergic bronchodilator therapy.

Module 3 Learning Objectives

Chapters Covered: 31,32,33,34,41,42,43,44,45,

Basic Pharmacology for Nursing 19th edition Willihnganz

Kaplan: PN Basics Text/E-Book; Pathway to success videos; orientation videos; question trainers; essential nursing content videos; SCLLR Website; NCSBN Website.

1. Identify and understand the mechanism of action, side effects and nursing management for drugs prescribed for: The digestive system.
2. Discuss the drug classifications and actions used to treat stomach disorders.
3. Identify the therapeutic classes of antiemetics.
4. Discuss therapeutic management of antiemetics for maximum benefit.
5. Identify the mechanism of action for the different classes of laxatives and describe medical conditions in which laxatives should not be used.
 1. Identify important nursing implementations associated with the drug therapy and treatment of diseases of the urinary system.
 2. Discuss the medications used to treat glaucoma and other eye disorders.
 3. Describe the role of targeted anticancer agents in treating cancer.
 4. Identify the therapeutic response and the common and serious adverse effects from skeletal muscle relaxant therapy.
 5. Explain the actions, effects, and adverse effects of classes of drugs used to treat infectious diseases: antimicrobial agents, allergic reaction, nephrotoxicity, ototoxicity, and hepatotoxicity.

Module 4 Learning Objectives

Chapters Covered: 35,36,37,38,46,47,48

Basic Pharmacology for Nursing 19th edition Willihnganz

Kaplan: PN Basics Text/E-Book; Pathway to success videos; orientation videos; question trainers; essential nursing content videos; SCLLR Website; NCSBN Website.

1. Identify and understand the mechanism of action, side effects and nursing management for drugs prescribed for: The endocrine system.
1. Identify the major nursing considerations associated with the management of the patient with diabetes.
2. Describe the signs, symptoms and treatments and nursing interventions for hyperglycemia and hypoglycemia.
3. Identify the two classes of drugs used to treat thyroid disease.
4. Describe the signs, symptoms, treatment and nursing interventions for hyperthyroidism and hypothyroidism.
5. Discuss the normal actions of mineralocorticoids and glucocorticoids in the body.
6. Discuss the clinical uses and potential adverse effects associated with corticosteroids.
7. Discuss the uses of estrogens and progestins.

***Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.**

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students’ performance is assessed based on weight associated with various measures/artifacts listed below.

Evaluation:

Tests	80%
Final Exam	10%
Quizzes/Assignments:	10%
Total =	100%

Students must achieve a minimum of a 77 weighted average on the unit tests and final exam (90% of grade) to progress. The grade is calculated as follows: Unit test average X percentage and Final exam test grade X percentage divided by 90.

As an example:

Unit test average: $77.54 \times .80 = 62.03$
 Final exam grade: $81.04 \times .10 = 8.1$
 Total points: $70.13 / 90 = 77.9$

The remaining points from other assignments will be added once the grade of 77 or greater is achieved to calculate the overall theory grade. There is no rounding of any grades. Grades are calculated to the hundredth decimal place. ****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

The student must achieve a weighted exam average of 77 or greater on the theory components of the course in order to pass the course. The theory components are the unit exams and the final exam. The weighted average for all other assignments will be added after the weighted average of 77 is achieved on the unit exam and final exams to generate the final calculated grade.

A = 100 – 90

B = 89 – 80

C = 79 – 77

D = 76 – 69

F = Less than 69

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for full term classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

ACADEMIC DISHONESTY:

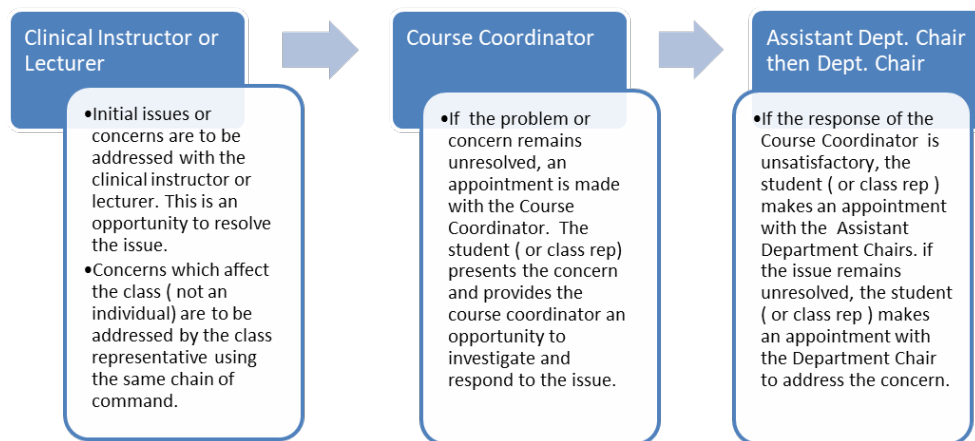
As part of your learning journey, it's important to engage with your assignments and projects in an authentic and meaningful way. While AI can be a useful tool for research or inspiration, using AI-generated assignments is not an appropriate way to complete your work. Submitting AI-generated content as your own is considered academic dishonesty and undermines your ability to truly grasp the material.

Your personal effort, critical thinking, and creativity are essential to your development. By completing assignments yourself, you gain the skills and knowledge necessary for success in both school and life. Remember that the process of learning is just as important as the final product. Let's keep our academic integrity strong and continue to take pride in our own work!

Refer to the Horry-Georgetown Technical College's Student Handbook for additional Information.

CHAIN OF COMMAND:

Please refer to the diagram below regarding the appropriate process to address issues, which arise during the semester.



****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

State the College's or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10-point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below. You must have your Dean's approval if changes in the scale are made.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student, and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following free resources:

1. Academic tutors for most subject areas, Writing Center support, and Academic Coaching for college success skills.
2. Online tutoring and academic support resources.
3. Professional and interpersonal communication coaching in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring or coaching, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the SSTC [Online Resource Center](#) to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following free resources:

1. Getting around HGTC: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. In-person and remote assistance are available for Desire2Learn, Student Portal, Degree Works, and Office 365.
3. Chat with our staff on TECH Talk, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552. Visit the Tech Central website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option # 1.



HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries have librarians and staff who can aid with research, computers to support academic research and related school-work, and individual/group study rooms. Printing is available as well at each location. Visit the [Library](#) website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L.
- Test administered in writing on paper.
- Test administered through Publisher Platforms (which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Testing candidates must make their appointments 24 hours in advance.

Students must bring a physical ID in order to take a test.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Students seeking accommodations are encouraged to visit HGTC's [Accessibility and Disability Service webpage](#) for detailed information.

It is the student's responsibility to self-identify as needing accommodations and to provide appropriate documentation. Once documentation is submitted, the student will participate in an interactive process with Accessibility and Disability Services staff to determine reasonable accommodations. Students may begin the accommodations process at any time; however, accommodations are **not retroactive** and will only be applied from the point at which they are approved. Students must contact the office **each semester** to renew their accommodations.

For assistance, please contact the Accessibility and Disability Services team at disabilityservices@hgtc.edu or 843-796-8818 (call or text).

COUNSELING SERVICES:

HGTC Counseling Services strives to optimize student success through managing personal and academic concerns that may interfere with achieving educational goals. Staff are available to every student for assistance and guidance on personal matters, academic concerns and other areas of concern. HGTC offers free in-person and telehealth counseling services to students. For more information about counseling services, please reach out to counseling@hgtc.edu or visit the website the [Counseling Services webpage](#).

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Our sincere commitment to both effective business management and equitable treatment of our employees requires that we present this Policy Statement as an embodiment of that commitment to the fullest.

Discrimination is conduct that includes unjust or prejudicial treatment based upon an individual's sex, race/color, religion, national origin, age, disability, service in the uniformed services (as defined in state and federal law), veteran status, political ideas, marital or family status, pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation, genetic information, genetic identity, gender expression, or sexual orientation that excludes an individual from participation in, denies the individual the benefits of, treats the individual differently, or otherwise adversely affects a term or condition of a person's working or learning environment. This includes failing to provide reasonable accommodation, consistent with state and federal law, to persons with disabilities.

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, Title VII, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX, Section 504, and Title II Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

Affirmative Action/Equal Opportunity Officer and Title IX Coordinator

Building 200, Room 205B, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu

TITLE IX REQUIREMENTS:

Title IX of the Education Amendments of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination.

HGTC prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking and will provide students, faculty, and staff with necessary information regarding prevention, policies, procedures, and resources.

Any student, or other member of the college community, who believes that they have been a victim of sexual harassment, domestic violence, dating violence, sexual assault, or stalking may file a report with the college's Title IX Coordinator or campus law enforcement*.

*Faculty and Staff are required to report these incidents to the Title IX Coordinator when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Student and prospective student inquiries concerning Title IX and its application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX, Section 504, and Title II Coordinator

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Jacquelyne.Snyder@hgtc.edu

PREGNANCY ACCOMMODATIONS

Under Title IX, colleges must not exclude a pregnant student from participating in any part of an educational program. Horry-Georgetown Technical College is committed to ensuring that pregnant students receive reasonable accommodations to ensure access to our educational programs.

Students should advise the Title IX Coordinator of a potential need for accommodations as soon as they know they are pregnant. It is extremely important that communication between student, instructors, and the Title IX Coordinator begin as soon as possible. Each situation is unique and will be addressed individually.

Title IX accommodations DO NOT apply to Financial Aid. Financial Aid regulations do not give the College any discretion in terms of Financial Aid eligibility.

Certain educational programs may have strict certification requirements or requirements mandated by outside regulatory agencies. Therefore, in some programs, the application of Title IX accommodations may be limited.

To request pregnancy accommodations, please complete the *Pregnancy Intake Form* that can be found [here](#).