Horry Georgetown Technical College

INSTRUCTIONAL PACKAGE

SUR 126
Principles of Surgical Pharmacology

Effective Term
Fall 2022/Spring 2023/Summer 2023

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: <u>202210</u>

COURSE PREFIX: SUR 126

COURSE TITLE: Principles of Surgical Pharmacology

CONTACT HOURS: 1

CREDIT HOURS: 1

RATIONALE FOR THE COURSE:

This course delivers focused content for the Surgical Technology student about medications and the common uses in surgical settings, as well as drug classes, administration, biological actions, and safe handling.

COURSE DESCRIPTION:

This course is a study of therapeutic agents and mathematical concepts in relation to the perioperative setting.

PREREQUISITES/CO-REQUISITES:

Meet the criteria for admission to HGTC. This includes submission of application fee; official high school transcript, including graduation date or copy of GED:

- Sign and submit the "Additional Admission/ Placement Requirement Affidavit" (Background Check Affidavit).
- Have a GPA of 2.0 on all prerequisite and core courses
- Complete prereq courses (BIO 210, BIO 211(5 yr. time limit), BIO 225(5 yr. time limit) within the required time limits and with grades of C or higher and a GPA of 2.0
- Complete a Health Physical and submit required immunizations, complete and pass a Certified Background Check and Drug Screening, submit deposit to hold your seat, and show proof of current HealthCare Providers CPR.
- Submit the Required Steps Session Checklist and verify completion of this STEPS session and indicate interest in admission to the Surgical Technology program.
- Transfer students must meet the College transfer student admission requirements
- Completion of AHS 102 Medical Terminology with a 2yr. time limit with grades of a C or higher and a GPA of 2.0.
- Currently enrolled in SUR 101: Introduction to Surgical Technology /Lecture and Lab.

REQUIRED MATERIALS:

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Textbooks:

1. ISBN -13: 9781305511170: Practical Pharmacology for the Surgical Technologist (24 Months)

Please visit the BOOKSTORE online site for most current textbook information. Use the direct link below to find textbooks.

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

ADDITIONAL REQUIREMENTS:

1. Laptop (Wi-Fi, Camera and Mic Capability) (Microsoft 365)
2. Printer/Scanner
3. Access Code from Cengage
4. Each student is required to complete the entrance exam on the Instructional Package and Power point with a grade of 100% to be considered officially enrolled.
5. Any submitted work from the student including discussion posts, assignments, etc. will not be given a grade until the presentation has been viewed and the quiz has been submitted. Failure to view the presentation and take the quiz before midnight on the last day to add/drop classes will result in the student being automatically dropped from the course

TECHNICAL REQUIREMENTS:

Access to Mindtap/Cengage Brain
Access to Desire2Learn (D2L), HGTC's student portal for course materials.
myHGTC and college email access.

STUDENT IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification 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 for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit Online Netiquette.

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Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Program Cognitive Objective:

At the completion of the program, the graduate of Horry Georgetown Technical College Surgical Technology Program will demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to his role as an entry level Surgical Technologist in Horry and Georgetown counties.

Program Psychomotor Objective:

At the completion of the program, the student will demonstrate technical proficiency in all skills necessary to fulfill the role of entry level Surgical Technology in Horry and Georgetown counties.

Program Affective Objective:

At the completion of the program, the student will demonstrate personal behaviors consistent with professional and employer expectations for the entry level Surgical Technology in Horry and Georgetown counties.

Practical Pharmacology for the Surgical Technologist:
- Ch. 1: Introduction to Pharmacology
- Ch. 2: Dimensional Analysis
- Ch. 3: Drug Identification and Classification
- Ch. 4: Drug Sources
- Ch. 5: Drug Forms
- Ch. 6: Routes and Administration
- Ch. 7: Pharmacokinetics
- Ch. 8: Pharmacodynamics
- Ch. 9: Drug handling
- Ch. 10: Medications Commonly Used in the Surgical Environment

Surgical Technology for The Surgical Technologist
- CH 9: Surgical Pharmacology and Anesthesia

Assessment(s):
Lecture:
- Cengage MindTap Assignments
- Tests
- Assignments
- Outline

Learning Outcomes:

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1. Define the term pharmacology.
2. List and describe federal and state drug regulations.
3. Provide rationale for the five narcotic classifications.
4. Differentiate the roles of the Drug Enforcement Administration and the Food and Drug Administration.
5. Explain the importance of the Joint Commission National Patient Safety Goals and identify the goals related to medication handling the surgical environment.
6. Recognize the potential consequences to the patient should a medication variation occur.
7. Define Key terms related to the student of surgical pharmacology.
8. Define dimensional analysis.
9. Perform basic mathematical calculations to allow conversion between the various measurement systems
10. Differentiate between military time and standard or civilian time and accurately state the time using either system.
11. Describe the international unit measurement system and identify the types of drugs measured in international units.
12. Describe the milliequivalent measurement system and identify the types of drugs measured in milliequivalents.
13. Describe the apothecary measurement system and note the circumstances in which the apothecary system is employed.
14. Identify terminology related to the metric system and describe the value of each term.
15. Accurately perform temperature conversions between the Celsius and Fahrenheit scales.
16. Calculate the correct drug dosages.
17. Differentiate between the three types of drug nomenclature.
18. Describe various drug classifications and provide examples of one or more drugs from each classification.
19. Identify the five main drug sources and provide examples of drugs from each source.
20. Differentiate between the three main types of drug forms.
21. Identify one or more drugs that are available in each form.
22. Name and describe drug administration routes.
23. Describe Pharmacokinetics and Pharmacodynamics.
24. Describe safe medication practices including the six rights of medication administration and the three-verification process and explain the importance of each.
25. List several drug dispensing systems regularly utilized in the surgical setting.
26. Distinguish drug packaging materials commonly utilized in the surgical setting.
27. List the importance of the information contained within a drug label
28. Identify drug handling supplies frequently used in the surgical setting.
29. Explain medication preparation in a non-sterile area.
30. Demonstrate the process for transfer of medication to the sterile field, including labeling and identification to other team members.

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31. List and describe various medication types commonly used for surgical patients
32. Predict the type of situations in which each medication type would be prescribed.
33. Provide at least one example of medication in each category.
34. Demonstrate safe transfer of medications and solutions from a non-sterile field to a sterile field.
35. Demonstrate the procedure for identifying a medication or solution on the sterile field.
36. Recognize the side effects and contraindications for the use of various medications and anesthetic drugs.
37. Interpret the factors that influence anesthesia selection for individual patients.
38. List the equipment used during anesthesia administration.
39. Demonstrate the precautions when identifying medications and solutions in the operating room.
40. Interpret the principles and describe the measurement and recording of vital signs.
41. Analyze how sterile technique is used in relation to anesthesia procedures
42. Compare and contrast the roles of the surgical technologist and the circulator during administration of anesthesia.

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 will be assessed, and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Lecture:
- Tests: 50%
- Assignments: 30%
- Final Cumulative Exam: 20%
- Total: 100%

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

GRADING SYSTEM:

93-100 = A   85 - 92 = B   77 - 84 =   C   69 - 76 =   D   68 or below = F

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

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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 of 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.

Please follow the proper exit protocol found in the Surgical Technology Handbook.

Part IV: Attendance

- Attendance is based on entrance assignments and weekly log in and blog submissions
- Students who have not logged in for more than two weeks will be withdrawn from the course.
- The student will be responsible for all information on D2l and MindTap.
- Students are expected to email the instructor when they are going to be absent for any reason.
- Students cannot request exemption from an attendance policy.

Student will be dropped from the course with a W or a WF if they have violated the attendance policy as written.

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes 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 re-enroll. **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:

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1. **Academic tutors** for most subject areas, **Writing Center support**, and **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, 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 [Online Resource Center](#) to access on-demand resources.

STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following <u>free</u> resources:

1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center (ORC)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **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 #2.

STUDENT TESTING:

Testing in an **online/hybrid** course may be accomplished in a variety of ways:
- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms

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

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:

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HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, based on race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators 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).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, 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 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
EEO and Title IX Coordinator
Building 200, Room 212A, Conway Campus
PO Box 261966, Conway, SC 29528-6066

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843-349-5212
Jacquelyne.Snyder@hgtc.edu