



INSTRUCTIONAL PACKAGE

SUR 126

Principles of Surgical Pharmacology

Effective Term

Fall 2025/Spring 2026/Summer 2026

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Part I: Course Information

Effective Term: Fall 2025/Spring 2026/Summer 2026

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.

COURSE DESCRIPTION:

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

PREREQUISITES/CO-REQUISITES:

Multiple Measures Math 1 /Or

MAT-Math 102 Credit C /Or

AT-Math 102 Credit TC /Or

MAT-Math 110 Credit C /Or

MAT-Math 110 Credit TC/Or

MAT-Math 120 Credit C/Or

MAT-Math 120 Credit TC/And

SUR-Surgical Technology _101Credit C

AHS- Medical Terminology _102 Credit C or Credit TC

ENG- English Composition _101Credit C or Credit TC

BIO – Anatomy and Physiology I_ 210 Credit C or Credit TC

***Online/Hybrid** courses require students to complete the [DLi Orientation Video](#) prior to enrolling in an online course.

REQUIRED MATERIALS:

Practical Pharmacology for the Surgical Technologist Mindtap Cengage Unlimited ISBN -13:
9781305511170

You will need access to unlimited for the duration of the program.

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:

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 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.

- Students are required to have a printer with scanner capability, Microsoft word and Adobe.

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](#).

Part II: Student Learning Outcomes

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.

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

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

Assessment(s):

Lecture:

- Cengage MindTap Assignments
- Tests
- Assignments
- Outline

Learning Outcomes:

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.7CC
8. Define dimensional analysis.7CC
9. Perform basic mathematical calculations to allow conversion between the various measurement systems 7CC
10. Differentiate between military time and standard or civilian time and accurately state the time using either system. 7CC
11. Describe the international unit measurement system and identify the types of drugs measured in international units.7CC
12. Describe the milliequivalent measurement system and identify the types of drugs measured in milliequivalents.7CC
13. Describe the apothecary measurement system and note the circumstances in which the apothecary system is employed.7CC
14. Identify terminology related to the metric system and describe the value of each term.7CC
15. Accurately perform temperature conversions between the Celsius and Fahrenheit scales.7CC
16. Calculate the correct drug dosages.7CC
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.7CC
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.7CC
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.7CC
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.
31. List and describe various medication types commonly used for surgical patients.
32. Predict the type of situation 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.7CC
37. Interpret the factors that influence anesthesia selection for individual patients.7CC
38. List the equipment used during anesthesia administration.7CC
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.7CC
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.***

GENERAL EDUCATION OUTCOMES:

This course fulfills the following General Education Outcomes through the (list the appropriate assessment – programs should select which GELO applies). Upon completion of this course, students will be able to:

(Check all that apply.)

- ☒ Communication – Students will be able to communicate effectively, orally and/or in written format.
- ☒ Critical thinking – Students will be able to demonstrate higher order of thinking when problem solving.

☒ Career Readiness/Lifelong Learning – Students will be able to effectively engage in the professional world or transition to higher level learning.

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

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

- 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 D2I 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 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 ssc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email ssc@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).

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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](#).