



OWENS
COMMUNITY COLLEGE

Course Syllabus
SEMESTER

School of Nursing and Health Professions

Course Name:	Surgical Pharmacology
Course & Section Number:	SRG 102
Meeting Day(s) & Time(s):	
Credits:	Lecture 1
Contact Hours:	Lecture 1
Text:	Pharmacology for the Surgical Technologist
Instructor's Name:	
Office Hours & Location:	
OCC Phone:	
OCC Email:	
Additional Contact Information:	

Please call me (name); it is my preferred name. If you have a preferred name, please let me know so I can use it.

****Please only use your student OCC email to contact me.**

Catalog Description:

In this course students will learn the pharmaceuticals used in surgical practice to include their actions, use, effects, contraindications, and administration. The anesthesia process will be covered in defining the stages of general anesthesia as well as the different types of agents used. The course will cover the equipment, safe practices, sterile technique and terminology used in relation to pharmacology. Students will also cover practices relating to alternative therapies such as herbal medication, acupuncture, massage, and music therapy and their effect on the surgical patient.

Prerequisites: HIT 125, MTH 133

Corequisites: SPD 100, SRG 101, BIO 211, ENG 111

If a print book, e-book, or access code is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called "Find Books" on the course schedule for each course section. See the example below.

OER and Owens Community College Library Resources (Open Educational Resources are free online materials for instructor and student use. Some OER material may be available in print in the Owens Community College Library.)

Inclusive Access (I.A.) Materials are included in the cost of the course to save students money through lower negotiated rates with publishers. Courses containing I.A. materials will have it noted on the online class schedule. If your course includes I.A. digital materials, you will receive an email with subject line,

"Your inclusive Access Materials," and it will include any codes or digital links. The email will come to your Owens Community College email from the Owens e-Campus Bookstore on the first day of class, if not before. Be sure to check your spam (junk email) if you do not find it in your inbox. If the email is not in your inbox or spam folder, contact your instructor immediately. You may also see a folder at the top of your course labelled "Course Materials by eCampus." This folder will contain any needed codes or links to needed materials. If the I.A. materials also include a printed book or are in print form, the item will be shipped to your address of record automatically based on your enrollment in the course. Please note that some courses do not include printed materials in I.A and those materials would need to be purchased separately using the link on the course schedule. When you access the Find Books link you will see which items in a course are included in I.A.

If a print book is required, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called "Find Books" on the course schedule for each course section. See the example below.

What will I learn in this course?

Course Objectives:

- Explain the different drug resources available
- Explain the seven rights of the medication process
- Explain the use, contraindications, dosage and administration form of medications used during surgical procedures and related to anesthesia.
- Illustrate practical working knowledge of types of anesthesia used during surgical procedures for specific body areas.

Student Learning Outcomes:

Students will:

Category	Outcome	Where Assessed
Knowledge	1. Define terms and abbreviations related to pharmacology.	Chapter 1–2 assignments, Medication Label Exploration Activity, Midterm Exam
	2. Identify the origins of, classification system, and types of pharmacologic agents used in surgical practice.	Ch. 3–8 activities, Antibiotic & Diagnostic Agents Assignments, Midterm Exam
	3. Detail the varying drug forms, administration pathways, and distribution systems.	Incision Academy Injection Modules, Pharmacology Math & Administration Activities
	4. Describe the principles of pharmacokinetics and pharmacodynamics.	Ch. 4–8 assignments, Reflection in From Vial to Vein Project
	5. Identify terms, stages and drugs used in the anesthesia process.	Incision Academy Anesthesia Series (Local/Regional/General), Final Exam
	6. Define emergency situations, the role of the surgical technologist during, and the drugs that may be utilized during an emergency.	Final Exam, General Anesthesia & Emergency Situations Lab
	7. Identify the types of integrated health practices that may be used in the perioperative setting and describe their indications for use.	Week 1 and 2 Activities
	8. Define the term dietary supplement and explain the FDA oversight of dietary supplements.	Classroom Discussion – Alternative Therapies

Category	Outcome	Where Assessed
	9. Identify challenges with pharmaceutical use based on religious, cultural, personal, gender, or racial concerns.	From Vial to Vein Project Reflection Section
Human Dimension	10. Develop a sense of responsibility to the patient concerning safe practices relating to pharmaceutical use in the operating room to eliminate errors.	ST Safety Lab Challenge, Medication Safety Station Checklists, Professionalism Rubric
Caring – Civic Learning	11. Engage with fellow students to relay the importance of pharmaceutical safety within the surgical environment and the importance of practicing sharp safety.	Safety Lab Challenge Team Rotation, Reflection Worksheet
Learning How to Learn	12. Identify sources of information on pharmaceuticals used in surgery available to the student to assist the student with being successful on the certification exam.	Incision Academy Course Summaries, Final Exam Review
Application	13. Determine the most appropriate risk-reduction or patient education strategies for patients considering complementary or alternative medicine.	Final Exam Scenario Question
	14. Apply safe practices to prevent needlesticks in the operating room environment.	Apply safe practices to prevent needlesticks in the operating room environment. ST Safety Lab Challenge Station 2 – Sharps Safety, Professionalism Rubric
Integration	15. Compare and contrast the differing roles between the licensed and non-licensed individual in the operating room and their roles in distributing medication in the surgical field.	From Vial to Vein Project, Class Discussion – Scope of Practice
	16. Connect the relationship between the use of alternative therapies and the field of surgery.	Final Reflection Activity

Program Outcomes:

The following program outcomes are assessed in this course

Category	Outcome	Where Assessed
Knowledge	1. Correlate the elements, actions, and use of medications and anesthetic agents used during the perioperative experience.	Incision Academy Modules (Anesthesia & Medication Handling); Midterm and Final Exams
	2. Demonstrate knowledge of emerging technologies in minimally invasive surgeries.	Incision Academy Simulation Modules; Discussion on Advancements in Anesthesia and Injection Technology
	3. Demonstrate an entry-level knowledge base by successfully completing the Certification exam.	Mastery Policy Exams (Midterm, Final); Professionalism Rubric (Accountability); Comprehensive Final Exam Review
Skills (Psychomotor)	4. Apply knowledge and skills from the biological	ST Safety Lab Challenge (All Stations); From Vial to

Category	Outcome	Where Assessed
	sciences to safely perform during the pre-operative, intraoperative, and postoperative phases of patient care.	Vein Project (Medication Pathway Mapping)
	5. Assemble and operate instruments, equipment and supplies for the delivery of patient care as an entry-level practitioner during basic surgical procedures.	Lab Skill Assessments (Medication Handling & Labeling, Sharps Safety); Incision Academy Hands-On Modules
	6. Implement safe practice techniques in regards to perioperative routines, patient transportation, positioning, and emergency procedures.	Safety Lab Challenge; Incision Academy Emergency & Intubation Scenarios; Final Exam
	7. Prioritize and organize the surgical field while considering the physiology and urgency of patient care needs.	ST Safety Lab Challenge Station 1–4; Reflection Worksheet on Safety & Prioritization
Behaviors (Affective)	8. Communicate professionally with patients, physicians, and co-workers.	Professionalism Rubric; Discussion Boards; Peer Evaluation within Lab Rotations
	9. Demonstrate a strong surgical conscience, accountability, and legal implications of an individual's actions as a member of the surgical team.	Professionalism Rubric; ST Safety Lab Challenge Observation; Mastery Policy Compliance
	10. Employ appropriate ethical, professional, and respectful values while providing care to diverse populations within the healthcare system.	From Vial to Vein Reflection; Professionalism Rubric; Course Discussions on Cultural and Religious Considerations in Medication Use

Institutional General Education Competencies:

As a student at Owens Community College, you will take General Education courses as part of your degree program. While specific to the General Education courses, will be reinforced in many of your degree program major courses and may be measured in your capstone course(s) and others as identified.

Competency	Where Assessed
1. Communicate effectively.	Lab Reflections (ST Safety Challenge), and "From Vial to Vein" Project written component; requires students to communicate findings and safety rationales clearly in written and oral formats.
2. Act with professional responsibility.	Professionalism Rubric (weekly), ST Safety Lab Challenge (station behavior and teamwork), and Mastery Policy compliance (academic integrity and accountability).
3. Demonstrate sensitivity to others' beliefs and values.	"From Vial to Vein" Project (ethical and cultural considerations), and Discussion on cultural and religious factors in medication use.
4. Think analytically, critically, and creatively.	MindTap pharmacology case studies, Incision Academy simulation scenarios, and Midterm/Final Exams—students analyze, problem-solve, and apply pharmacologic principles to surgical cases.

How Will Your Grade Be Determined and What Are the Major Assignments for the Semester?

Graded Items:

Evaluation Measure The grade points for the areas of work are as follows.	Student Learning Outcomes Assessed	Value	Percentage Weight
Mindtap Assignments		35 points	
Activities			
Incision Academy		350 Points	
Project		100 Points	
Professionalism		80 Points	
Midterm		100 points	
Final		100 points	
Skill Assessment		C/I	
Total		1581 points	100%

Grading Procedure:

Grades will be calculated on the following scale:

Grade Percentage	Point Totals	Letter Grade
91-100	1438.71-1581	A
82-90.99	1296.42-1438.70	B
73-81.99	1154.13-1296.40	C
64-72.99	1011.84-1154.12	D
0-63.99	0-1011.83	F

Facilitating Successful Completion of the Course:

We welcome questions, concerns, and experiences relevant to the topic, course and/or professional field. We learn from each other. If appropriate, we encourage you to share and ask during class. If it is not, please don't hesitate to see any instructor during student hours or email them. If we feel there is a need, we will each out to the student or class to address that need. We will make referrals to other campus resources as needed. We are aware that life is happening, and this class is not the only thing you have going on.

Test Mastery Policy

In alignment with the Surgical Technology Program's commitment to competency-based education and professional readiness, the department follows a **mastery-based testing policy**. Students are required to demonstrate a minimum level of mastery on all major examinations to progress academically and have non-exam coursework applied toward their final grade.

Policy Requirements:

- Students must achieve a minimum score of 73% on each of the two major unit exams in SRG 102.

- If mastery is not achieved on an initial exam attempt, one retake opportunity will be provided.
- Retake exams will use case study, short answer, and essay-based questions designed to assess applied clinical reasoning.
- Assignment grades (MindTap, Touch Surgery, Incision Academy, workbook, projects, participation) will not be included in the final course grade until exam mastery is demonstrated.
- Students who do not meet the mastery standard after the retake will not receive a passing grade in the course, regardless of assignment performance.
- **Addendum:** Students who fail to meet mastery after both the initial exam and retake may be offered a one-time comprehensive exam consisting of 25 multiple-choice questions from each of the four content areas in SRG 201 (totaling 100 questions). The highest possible score awarded for exam mastery on this comprehensive exam will be capped at 73%. This exam is intended only for students facing a failing grade due to unmet mastery and **cannot be used to raise scores for students who have already passed unit exams.**

Rationale:

This policy ensures that students possess foundational knowledge necessary for success in clinical practice and certification. It promotes critical thinking, accountability, and readiness for the demands of surgical technology.

Student Acknowledgment Form

Surgical Technology Test Mastery Acknowledgment

I understand that the Surgical Technology Program follows a **mastery-based testing policy**. To receive a passing grade in this course:

- I must earn a minimum score of 73% on each of the four-unit exams.
- If I do not reach mastery on an exam, I will be provided one retake opportunity, which will include case study, short answer, and essay-based questions.
- My grades from assignments, projects, and other non-exam activities will only be applied to my final course grade once I have achieved exam mastery.

Acknowledgement of this policy will be in your Blackboard course.

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's [Student Code of Conduct](#), which includes academic honesty, encompassing plagiarism. See the [Board Policy](#) for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's [Anti-Discrimination and Harassment Policy](#) and the College's [Title IX Policy](#)/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu

The policy may be found on the Owens website: [3358:11-2-63 Accommodation](#) for a Student Absence for the Observance of Religious Beliefs and Practices Policy

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible.

Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

Student Responsibilities:

Professional Communication:

- Accuracy and Truthfulness: Ensure that all communication, whether verbal or written, is accurate, truthful, and based on reliable information.
- Timeliness: Respond promptly to communication. Acknowledge receipt and provide a timeframe for a detailed response if necessary.
- Professional Tone: Maintain a professional tone in all forms of communication, including emails and class meetings. Avoid using language that may be perceived as offensive, discriminatory, or disrespectful.

Professionalism Rubric – Lecture, Laboratory, and Clinical Courses Evaluation

Category	Exceeds Expectations	<i>Meets Expectations</i>	<i>Needs Improvement</i>	<i>Unsatisfactory</i>
Attendance & Punctuality	Attends all classes, always on time. Notifies instructor appropriately of absences.	Rarely absent or late; proper notification given.	Occasionally late or absent; inconsistent notification.	Frequently late or absent; fails to notify or follows improper procedures.
Preparedness	Always prepared with materials and completed assignments; consistently ready to engage.	Usually prepared with necessary materials and assignments.	Sometimes unprepared or missing materials.	Rarely prepared or significantly behind on assignments.
Respect & Communication	Consistently communicates respectfully with faculty and peers; uses professional tone.	Generally, communicates respectfully with few lapses.	Occasionally uses inappropriate tone or disrespectful behavior.	Disrespectful or disruptive communication; frequent unprofessional language.
Engagement & Participation	Actively contributes to discussions; consistently demonstrates critical thinking and focus.	Participates regularly and shows engagement.	Infrequently participates or appears distracted.	No participation; disengaged from learning environment.
Responsibility & Integrity	Always meets deadlines, follows policies, and upholds academic integrity.	Usually meets deadlines and follows policies; demonstrates integrity.	Occasional late work or minor lapses in responsibility.	Repeated missed deadlines, policy violations, or academic dishonesty.

Attendance and Participation

Active participation in class discussions, activities, and assignments is an essential part of learning and understanding the course material. Attendance is a graded component of this course. If you anticipate being absent, please notify the instructor in advance when possible. Students should consult the assignment calendar to identify missed topics or assignments, review posted materials, and contact the instructor with any course-related questions.

Class will begin at the scheduled time. Repeated or habitual lateness may result in a deduction in the professionalism grade. Participation in lab activities is required for successful course completion. If you are unable to participate in a lab activity, inform the instructor as soon as possible to determine if alternative arrangements are available.

Assignment Submission

Students are expected to follow the assignment calendar and submission procedures posted in the Blackboard course shell. Assignments should be submitted by the posted due date. Late submissions may receive partial credit in accordance with course policy. Please review the specific instructions for Discussion Boards.

Course Communication

Announcements and updates will be posted in Blackboard and/or sent to your Owens student email account. Students should check email daily and log into Blackboard several times per week to stay informed of upcoming deadlines and assignments.

Tests and Quizzes

All scheduled test and quiz dates are listed on the assignment calendar. Tests and quizzes will be administered on Blackboard in the Owens testing center. Please see the following link to schedule exams: <https://www.owens.edu/testing/>.

Instructor Contact

Email is the preferred method of communication outside of posted student hours. Please include your course name in the subject line for faster response.

Requests for Assistance

Students are encouraged to ask questions or request clarification on any course-related content. If something is unclear, inform the instructor promptly so that it can be addressed. All courses in this program build on previous material, so understanding current topics is essential to future success.

Instructor Expectations and Responsibilities

Class Time and Attendance

Instructors will begin and end class at the scheduled times. If a class must be canceled or rescheduled, students will be notified as soon as possible via email and/or a Blackboard announcement.

Grading of Assignments

Assignments submitted by the posted due date will generally be graded and recorded in the Blackboard Grade Center within 3 days. Assignments submitted after the due date may require up to 8 days for grading.

Email Communication

Instructors will make every effort to respond to emails within 12 hours on weekdays and within 48 hours on weekends. Students should use their Owens student email account for all course-related correspondence and include the course name in the subject line.

Announcements

Course updates, reminders, and important information will be posted on the Blackboard Announcement page and/or sent to students' Owens email accounts.

Student Hours

Designated student hours are set aside for individual meetings outside of class time. During these times, instructors are available to address course-related questions or concerns and provide academic guidance.

Support for Course Success

Students are encouraged to ask questions and seek clarification on any course material. Instructors may reach out to individual students or the entire class to address course-related needs. Referrals to campus academic resources may be provided when appropriate to support student learning and success.

Classroom Environment:

This course fosters a professional and respectful learning environment where all students can participate and succeed. Students are encouraged to contribute to discussions, ask questions, and share ideas related to the course material. All participants are expected to communicate courteously, listen attentively, and conduct themselves with professionalism at all times.

How Does the College Support Us?

Use this [link](#) for a listing of support resources such as **Campus Resources, Campus Life, Getting Around Campus, and Security.**

Instructor Discrepancies:

If at any time throughout the semester you have a problem with the course and/or instructor, contact the instructor. If the issue cannot be resolved after discussion with the instructor, see the Department Chair: NAME, ROOM, EMAIL, TELEPHONE.

Tentative Class Assignment:

Last Update DATE: **This is just to give you a guide as to what we are going to cover in this course and when.**

Week	SLOs	Topic
1	1, 2, 3, 10	Topic: Basic Pharmacology and Medication Development, Regulation, and Resources Reading: Burton & Howe Chapters 1 & 2 Assignments: Activity: Medication Label Exploration
2	3, 8, 14, 15	Topic: Pharmacology Math & Medication Administration Readings: Burton & Howe Chapter 3 & 4 Assignments: - Incision Academy: Subcutaneous Injection, Intramuscular Injection - Activities: Pharmacology Math, Medication Administration, Pharmacology Case Studies, Medication Supply
3	2, 4, 5	Topic: Antibiotics & Diagnostic Agents Readings: Burton & Howe Chapters 5 & 6 Assignments: Activities: Diagnostic Agents, Antibiotics
4	2, 4, 10, 14	Topic: Diuretics and Hormones Readings: Burton & Howe Chapters 7 & 8 Activities: Activities: Diuretic, Hormones Lab: Safety Challenge Begin
5	2, 4, 10, 13, 14	Topic: Medications that Affect Coagulation, Ophthalmic Agents, & Fluid and Irrigation

	Midterm: 1-9	Readings: Burton & Howe Chapters 9, 10, and 11 Assignments Activities: Meds that Affect Coagulation, Create a Mnemonic, Fluids and Irrigation Exam: Midterm
6		Topic: TBD Optional: Lab time DATE to practice skills
7	5, 9, 11, 12, 13	Topic: Preoperative Medications & Patient Monitoring and Local and Regional Anesthesia Readings: Rodriguez Ch. 12 and 13 Assignments - Activities: Preoperative Checklist, Case Scenarios, Patient Monitoring, Local and Regional Anesthetic - Incision Academy: Introduction to Topical, Local, and Regional Anesthesia, Local Infiltration and Field Block Anesthesia, Subcutaneous Infiltration of Local Anesthetic, Spinal Anesthesia, Digital Nerve Block of Middle Finger, Introduction to Anesthesia Monitoring and Intravenous Access Project: From Vial to Vein: Medication Pathway Mapping Project
8	5, 6, 10, 14, 16 Final Exam: 1-16	Topic: General Anesthesia & Emergency Situations Readings: Rodriguez Chapters 14 and 15 Assignments: - Activities: General Anesthesia - Incision Academy: Endotracheal Intubation, Intubation of the COVID-19 Patient, Intro to Anesthesia Intubation, Intro to Anesthesia Maintenance and Emergence Lab: Safety Challenge Due Exam: Final Exam

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.