

SUL ROSS STATE UNIVERSITY

Graduate Nursing Program

MSNC 5309

Advanced Pathophysiology, Physical Assessment, & Pharmacology

MSN Nurse Educator Core Course

Course Element	Requirement
Credit Hours	3
Term Length	Term A/B - 16 weeks
Delivery	100% online asynchronous; optional synchronous sessions may be scheduled by faculty
Didactic / Clinical	3 didactic credits / 0 clinical credits
Total Instructional Hours	45 online lecture hours

Course Overview

MSNC 5309 Advanced Pathophysiology, Physical Assessment, & Pharmacology

Course Description

In this course, students develop advanced nursing knowledge of pathophysiology, pharmacology, and health assessment in nursing education. Students analyze advanced pathophysiology, pharmacology, and health assessment needs impacting individuals, families, or populations within healthcare settings. Students build upon foundational knowledge to facilitate teaching and learning strategies.

Requisites

Pre-requisites: Graduate nursing admission requirements and any courses designated by the approved program plan. Final prerequisite language is subject to curriculum committee approval.

Faculty Information

Item	Information
Faculty Name	Dr. Traci Henry DNP, RN
Email	Traci.Henry@sulross.edu
Phone	713-825-4137
Online Office Hours	Thursday and Friday 9 am – 12 pm; and scheduled appts as needed

Meeting Times and Course Week

The class week runs Sunday at 12:00 a.m. through Sunday at 11:59 p.m. Central Time. Unless otherwise indicated, initial discussion posts are due Wednesday and all remaining assignments are due Sunday at 11:59 p.m. Central Time. Faculty may schedule optional synchronous sessions; recordings and accessible alternatives should be provided.

Program Learning Outcomes

Graduate Nursing Program Purpose

The graduate nursing program prepares nurses to integrate advanced nursing knowledge, evidence, leadership, collaboration, technology, ethics, and culturally responsive practice to improve learning, quality, safety, and health outcomes across educational and healthcare environments.

MSN Nurse Educator Track Program Learning Outcomes

1. Integrate advanced nursing knowledge with the role of the nurse educator to facilitate learning in a variety of diverse healthcare and educational environments.
2. Assimilate evidence-based knowledge to design innovative curricula, teaching-learning strategies, assessments, and evaluations.
3. Create collaborative interprofessional partnerships to affect health outcomes for specific populations.
4. Demonstrate innovative teaching strategies through the delivery of learner-centered education.
5. Incorporate culturally responsive teaching practices embracing diversity, equity, and inclusion.
6. Synthesize advanced nursing knowledge to develop outcome-driven health education curriculum.

Course Learning Outcomes

1. Integrate advanced pathophysiologic and pharmacologic principles to explain disease mechanisms, clinical manifestations, complications, and patient outcomes across selected body systems and populations.
2. Analyze comprehensive and focused health assessment findings, laboratory and diagnostic data, and contextual factors to distinguish expected findings from common health alterations and prioritize safety concerns.
3. Appraise evidence-based pharmacologic and nonpharmacologic management, medication-safety principles, patient education needs, and interprofessional considerations relevant to selected conditions and populations.
4. Design learner-centered teaching strategies that integrate pathophysiology, physical assessment, pharmacology, clinical judgment, quality, safety, and culturally responsive care in nursing education settings.
5. Develop and evaluate evidence-based educational experiences, assessments, and learning resources that facilitate transfer of advanced nursing knowledge into academic, clinical, and professional development practice.

Course Objective and Assessment Maps

Course Learning Outcome to MSN Nurse Educator Program Outcome Map

Course Learning Outcome	Aligned Program Outcomes	Rationale
CLO 1	PLO 1, PLO 6	Integrates and synthesizes advanced scientific nursing knowledge for use in health education and curriculum.
CLO 2	PLO 1, PLO 2, PLO 6	Uses advanced assessment evidence and clinical data to support accurate, outcome-driven learning.
CLO 3	PLO 1, PLO 2, PLO 3, PLO 5	Links evidence, medication safety, collaboration, and culturally responsive care.
CLO 4	PLO 2, PLO 4, PLO 5, PLO 6	Designs innovative, learner-centered, inclusive teaching strategies that integrate the three advanced sciences.
CLO 5	PLO 2, PLO 3, PLO 4, PLO 5, PLO 6	Develops and evaluates outcome-driven educational products and collaborative learning experiences.

Course Learning Outcome to Assessment Map

Assessment	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Weekly Online Discussions	I/R	I/R	I/R	R	R
Weekly Video Scenario Reflections	I/R	I/R	R	R	R

Assessment	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Week 4 Integrated Paper 1	M	M	M	M	R
Week 8 Integrated Paper 2	M	M	M	M	R
Week 12 Integrated Paper 3	M	M	M	M	R
Week 15 Signature Assignment	M	M	M	M	M
Week 16 Synthesis Activities	R	R	R	M	M

Key: I = Introduced; R = Reinforced; M = Mastered/Measured at the course level.

Major Assignment Alignment

Major Assignment	Primary Purpose	Course Outcomes	Program Outcomes
Week 4 Paper: Integrated Cardiometabolic Concept Analysis and Teaching Plan	Integrate cardiovascular or metabolic pathophysiology, assessment, pharmacology, evidence, and an educator strategy.	CLO 1-4; reinforces CLO 5	PLO 1, 2, 4, 5, 6
Week 8 Paper: Respiratory-Renal Unfolding Case and Clinical Judgment Education Analysis	Analyze cue recognition, system interaction, medication safety, and an unfolding teaching approach.	CLO 1-4; reinforces CLO 5	PLO 1-6
Week 12 Paper: Complex Condition, Polypharmacy, and Medication-Safety Education Analysis	Synthesize multisystem risk, assessment, medication safety, learner misconceptions, and evidence-based teaching.	CLO 1-5	PLO 1-6
Week 15 Signature: Integrated Three Ps Nurse Educator Teaching Module	Design a complete evidence-based module integrating pathophysiology, assessment, pharmacology, teaching, learner assessment, evaluation, inclusion, and quality.	CLO 1-5	PLO 1-6

Required Resources and Learning Activities

Required Resources

- Best, J. T., Buttriss, G., et al. Pathophysiology, Physical Assessment, and Pharmacology: Advanced Integrative Clinical Concepts. F.A. Davis Company. ISBN 978-0-8036-7567-4.
- Caputi, L. Certified Nurse Educator Review Book (2nd ed.). Wolters Kluwer. ISBN 9781975159863.
- American Psychological Association. Publication Manual of the American Psychological Association (7th ed.).
- Current peer-reviewed literature, evidence-based clinical practice guidelines, drug-safety resources, assessment standards, and nurse educator resources posted in the learning management system.
- Faculty-developed concept maps, unfolding cases, simulation or virtual-patient activities, medication-safety exercises, and assessment exemplars.

Learning Activities

Class Participation

Students engage in online learning activities that connect disease mechanisms, assessment cues, pharmacologic and nonpharmacologic management, and nurse educator decision-making. Activities include concept mapping, case comparison, virtual assessment review, medication-safety analysis, learner misconception correction, unfolding case design, and peer feedback.

Discussion Forums

Students participate in discussion forums during Weeks 1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, and 16. Each discussion requires one substantive initial response and at least two substantive peer responses. Prompts emphasize integration of advanced content, evidence, clinical judgment, quality, safety, equity, and the nurse educator role.

Video Scenario Reflections

Students submit a 4- to 6-minute video scenario reflection during Weeks 1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, and 16. Students analyze a realistic learner, patient-education, or faculty-development scenario and explain how an MSN nurse educator should respond using evidence and effective teaching practices.

Professional Papers and Signature Project

Three 4- to 5-page integrative papers are due in Weeks 4, 8, and 12. The Week 15 Signature Assignment is a comprehensive evidence-based nurse educator teaching module that integrates pathophysiology, physical assessment, pharmacology, clinical judgment, learner assessment, technology, inclusion, quality, and safety.

Assessment of Student Learning

Evaluation of student performance is based on evidence of achievement of course learning outcomes. The passing standard for graduate-level courses is 80%. Students must earn at least 800 of 1,000 possible points to successfully complete the course.

Evaluation Criteria

Formative Assessment: Ongoing assessment that provides feedback and supports improvement. Examples include discussions, video reflections, concept-mapping activities, case analyses, and project milestones.

Summative Assessment: Assessment used to determine whether course and program outcomes have been achieved. The three integrative papers and Week 15 Signature Assignment provide direct evidence of advanced content integration and nurse educator competency.

Course Learning Activities and Grading

Category	Assignment	Points	Week Due
Formative	Weekly Online Discussions	240 total (20 each)	Weeks 1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, and 16
Formative	Weekly Video Scenario Reflections	180 total (15 each)	Weeks 1, 2, 3, 5, 6, 7, 9, 10, 11, 13, 14, and 16
Integrative	Paper 1: Cardiometabolic Concept Analysis and Teaching Plan	100	Week 4
Integrative	Paper 2: Respiratory-Renal Unfolding Case and Clinical Judgment Education Analysis	100	Week 8
Integrative	Paper 3: Complex Condition, Polypharmacy, and Medication-Safety Education Analysis	100	Week 12
Summative / Signature	Integrated Three Ps Nurse Educator Teaching Module	280	Week 15
	Total	1,000	

Course Learning Activities, Grading, and Expectations

- All assignments must be submitted through the online classroom during the week they are due unless otherwise noted. Email submissions are not accepted.
- All assignments must be created for this course. Work submitted for credit in another course may not be duplicated unless approved in writing by the faculty member and Program Director.
- Students should review assignment instructions and grading rubrics before beginning each graded activity.
- Patient, learner, faculty, staff, community, and organizational information must be de-identified. Students may not upload protected health information or proprietary organizational data.
- Pharmacology content must remain evidence-based and within the nurse educator role. Course work does not authorize prescribing, diagnosing, or individualized treatment outside the student's legal scope.
- Students should retain copies of completed assignments for program assessment, e-portfolio, accreditation, and professional development purposes.
- Use of generative artificial intelligence must comply with university policy and assignment-specific directions. Students remain responsible for accuracy, attribution, privacy, bias review, and original scholarly work.

Discussion Expectations

- Initial post: approximately 300-450 words, due Wednesday by 11:59 p.m. Central Time.
- Use at least two credible sources; at least one should be a recent peer-reviewed source and one may be a current guideline, drug-safety source, or professional standard.
- Respond substantively to at least two peers by Sunday at 11:59 p.m. Central Time.
- Peer responses should extend analysis, correct or clarify reasoning respectfully, add evidence, compare teaching strategies, or apply the concept to another learner population or setting.
- Use APA-style citations and references, professional and inclusive language, and confidentiality protections.

Video Reflection Expectations

- Submit a 4- to 6-minute original video response to the assigned scenario.
- Address all scenario questions and explicitly connect pathophysiology, assessment, pharmacology, and the MSN nurse educator role.
- Use at least one scholarly or authoritative source and submit a brief reference list or transcript with citations.
- Organize the response with a clear opening, analysis, proposed educator action, and closing reflection.
- Provide captions or an accurate transcript and follow accessibility and professional communication expectations.

Professional Nursing Standards and Authoritative Resources

AACN Essentials

Course experiences support advanced-level development in knowledge for nursing practice, person-centered care, quality and safety, interprofessional partnerships, informatics and healthcare technologies, professionalism, and personal, professional, and leadership development. Faculty should verify alignment with the institution-adopted version of the AACN Essentials before each curriculum review.

National League for Nursing and Nurse Educator Competencies

The course supports nurse educator development in facilitating learning, facilitating learner development, using assessment and evaluation, participating in curriculum design, pursuing continuous quality improvement, functioning as a change agent and leader, engaging in scholarship, and functioning within educational environments.

Quality, Safety, Equity, and Medication Education

All learning experiences integrate cue recognition, clinical judgment, medication reconciliation and safety, patient and learner education, interprofessional communication, health literacy, cultural humility, accessibility, and evaluation of unintended effects. Faculty should use current guidelines and drug-safety resources rather than relying on static medication lists.

Ethics and Scope

Students apply ethical principles to advanced content selection, case construction, learner assessment, feedback, simulation, technology use, debriefing, and dissemination. Cases must be de-identified and designed to support education rather than provide unsupervised individualized medical advice.

Sixteen-Week Course Schedule

This schedule is subject to change by faculty as needed. Assigned work must be completed by Sunday at 11:59 p.m. Central Time unless otherwise indicated.

Week	Topic	Primary Objectives	Graded Assignments
1	Integrating Pathophysiology, Assessment, and Pharmacology in Nursing Education	Explain the three advanced sciences as an integrated foundation for clinical judgment and teaching. (CLO 1, 4)	Discussion; Video Reflection
2	Cardiovascular I: Hypertension and Vascular Regulation	Integrate mechanisms, focused assessment, medication classes, risk reduction, and educator strategies. (CLO 1-4)	Discussion; Video Reflection
3	Cardiovascular II: Ischemia, Myocardial Infarction, and Heart Failure	Analyze changing cues, diagnostics, medications, complications, and priority teaching. (CLO 1-4)	Discussion; Video Reflection
4	Cardiometabolic Integration	Synthesize advanced content and a learner-centered teaching plan. (CLO 1-4)	Paper 1
5	Endocrine and Metabolic Systems	Integrate diabetes, obesity, thyroid regulation, assessment, pharmacology, and stigma-free education. (CLO 1-4)	Discussion; Video Reflection
6	Respiratory System	Differentiate common respiratory alterations and connect assessment trends, medications, oxygenation, and teaching. (CLO 1-4)	Discussion; Video Reflection
7	Renal, Urinary, Fluid, and Electrolyte Regulation	Analyze renal function, laboratory trends, medication accumulation, electrolytes, and safety. (CLO 1-4)	Discussion; Video Reflection
8	Respiratory-Renal Clinical Judgment Integration	Create an unfolding case and analyze cue recognition, intervention, and learning assessment. (CLO 1-5)	Paper 2
9	Gastrointestinal, Hepatic, and Nutritional Systems	Integrate GI/hepatic mechanisms, assessment, medications, nutrition, and patient education. (CLO 1-4)	Discussion; Video Reflection

Week	Topic	Primary Objectives	Graded Assignments
10	Immune, Hematologic, Infectious, and Hypersensitivity Concepts	Analyze immune response, infection risk, hematologic cues, drug reactions, and safety teaching. (CLO 1-4)	Discussion; Video Reflection
11	Musculoskeletal, Rheumatologic, and Pain Concepts	Compare inflammatory and degenerative conditions, pain assessment, pharmacology, function, and bias. (CLO 1-4)	Discussion; Video Reflection
12	Complex Conditions and Polypharmacy	Synthesize multisystem risk, medication safety, evidence, and educator strategies. (CLO 1-5)	Paper 3
13	Neurologic, Cognitive, and Sensory Systems	Integrate neurologic mechanisms, focused assessment, time-sensitive cues, medications, and teaching. (CLO 1-4)	Discussion; Video Reflection
14	Behavioral Health, Psychopharmacology, and Special Populations	Analyze psychopharmacology, safety, stigma, age-related considerations, and culturally responsive education. (CLO 1-5)	Discussion; Video Reflection
15	Integrated Three Ps Nurse Educator Teaching Module	Design and present a complete evidence-based teaching module with learning and evaluation plans. (CLO 1-5)	Signature Assignment
16	Comprehensive Synthesis, Evaluation, and Educator Scholarship	Evaluate transfer of learning, curricular integration, professional growth, and improvement priorities. (CLO 4, 5)	Discussion; Video Reflection

Calculation of Final Grade:

The final grade is derived as a summary of the points delineated on specific rubrics for the assignments and participation. Students must earn 80% (800 points) or higher in order to pass the course.

Grading Scale

- A = 90 – 100
- B = 80 – 89
- C = 75 – 79
- D = 70 – 74
- F = 69 or below

POLICIES FOR EXAMS AND ASSIGNMENTS

Online testing/Assessments: When assigned, examinations will be given via the use of Blackboard or faculty proctored exams in the classroom. Instructions will be provided at the time of the examination. Missed

Examinations and Makeup Examinations: Faculty members must be informed immediately when a student is aware that an examination will be missed. Make-up should occur within a week of the scheduled examination as agreed on between faculty and student. Should scheduling conflicts and/or family emergencies arise, students should contact faculty by phone, email, or text as soon as possible. If students have spoken with faculty and an agreement is reached, late make-up exams can be arranged without penalty.

Late and Make-up Assignments: To achieve the designated points for an assignment, the assignment must be submitted at or before the scheduled date and time. Ten points per calendar day will be deducted for late submission of assignments. Assignments will not be accepted after three (3) days late. Should scheduling conflicts and/or family emergencies arise, students should contact faculty by phone, email or text as soon as possible. If students have spoken with faculty and an agreement is reached, late and make-up assignment extensions can be arranged without penalty.

COMMUNICATIONS:

- Announcements – Check announcements each time you log onto the course.
- Course email – Check course email frequently for communications and make sure your email address is current. Faculty will respond to inquiries and comments within 24 hours Monday- Friday.
- Use of technology: If you have any technical questions, problems or concerns with Blackboard, do not spend more than 15 minutes on any technical problem, seek help immediately. Contact the 24-7 Help Desk at: 1-888-837-2882 and/or techassist@sulross.edu.

- Responses to emails and course postings: Please respond to faculty requests and/or communications within 24 hours. Use course or Sul Ross email & if not available, mobile phone or texting between the hours of 9 AM and 6PM if possible. Messages received on the weekends or holidays will be answered by the next working day.
- Assignments: Assignments will be reviewed and returned with feedback/grade within 4 days of submission.
- Writing and use of APA: All written assignments and bulletin board postings will be submitted using the American Psychological Association (APA) Guidelines. <http://owl.english.purdue.edu/owl/resource/560/01>

ATTENDANCE AND PARTICIPATION:

- Your attendance is expected at every class meeting.
- Readings and learning activities relevant to the weekly topic are identified in the course schedule and modules.
- Scholarly and knowledgeable participation requires that you read assigned readings prior to joining the class discussions.
- If you have an emergency and cannot attend a class meeting or complete an assignment by the due date, you must contact your faculty by phone, email or text as soon as possible and make arrangements to make up the assignments.

MANDATORY UNIVERSITY STATEMENTS

Academic Honesty Policy:

The University expects all students to engage in all academic pursuits in a manner that is beyond reproach and to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. The University may initiate disciplinary proceedings against a student accused of any form of academic dishonesty, including but not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials. Academic Dishonesty includes:

1. Copying from another student's test paper, laboratory report, other report, or computer files, data listings, and/or programs, or allowing another student to copy from same.
2. Using, during a test, materials not authorized by the person giving the test.
3. Collaborating, without authorization, with another person during an examination or in preparing academic work.
4. Knowingly, and without authorization, using, buying, selling, stealing, transporting, soliciting, copying, or possessing, in whole or in part, the contents of a non-administered test.
5. Substituting for another student; permitting any other person or otherwise assisting any other person to substitute for oneself or for another student in the taking of an examination or test or the preparation of academic work to be submitted for academic credit.
6. Bribing another person to obtain a non-administered test or information about a non-administered test.
7. Purchasing or otherwise acquiring and submitting as one's own work any research paper or other writing assignment prepared by an individual or firm. This section does not apply to the typing of a rough and/or final version of an assignment by a professional typist.
8. "Plagiarism" means the appropriation and the unacknowledged incorporation of another's work or idea in one's own written work offered for credit.

9. "Collusion" means the unauthorized collaboration with another person in preparing written work offered for credit.
10. "Abuse of resource materials" means the mutilation, destruction, concealment, theft or alteration of materials provided to assist students in the mastery of course materials.
11. "Academic work" means the preparation of an essay, dissertation, thesis, report, problem, assignment, or other project that the student submits as a course requirement or for a grade.

Statement for use of AI

The rise of generative AI technologies—such as ChatGPT and DALL·E—has generated significant interest among students in our field. These tools can support a range of academic activities, including idea generation, deeper exploration of complex questions or problems, and creative engagement with course materials.

In this course, we may incorporate generative AI tools (e.g., ChatGPT) to critically examine how such technologies can enhance our understanding of the subject matter. You will receive clear instructions regarding when and how these tools may be used, along with appropriate guidance on attribution where applicable.

Please note: Any use of generative AI tools outside where specified guidelines permit will be considered a violation of academic integrity and treated as plagiarism.

All academic dishonesty cases may be first considered and reviewed by the faculty member. If the faculty member believes that an academic penalty is necessary, he/she may assign a penalty, but must notify the student of his/her right to appeal to the Department Chair, the Associate Provost/Dean, and eventually to the Provost and Vice President for Academic Affairs before imposition of the penalty. At each step in the process, the student shall be entitled to written notice of the offense and/or the administrative decision, an opportunity to respond, and an impartial disposition as to the merits of his/her case.

In the case of flagrant or repeated violations, the Vice President for Academic Affairs may refer the matter to the Dean of Students for further disciplinary action. No disciplinary action shall become effective against the student until the student has received procedural due process except as provided under Interim Disciplinary Action.

AMERICANS WITH DISABILITIES ACT (ADA) STATEMENT

Sul Ross State University is committed to compliance with the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. Qualified students with disabilities needing academic or other accommodations to facilitate full participation in our programs, services and activities should contact the

Accessibilities Coordinator, Ferguson Hall Room 112, Monday – Friday 8:00 a.m. – 5:00 p.m., 432-837-8203 at the Alpine campus.

GENERAL CAMPUS REGULATIONS AND CONDUCT

All students are expected to conduct themselves in a manner consistent with the University's functions as an educational institution. It is also expected that all students who enroll at Sul Ross State University agree to assume the responsibilities of citizenship in the university community. Association in such a university community is purely voluntary, and any student may resign from it at any time when he/she considers the obligation of membership disproportionate to the benefits. All students are subject to university authority, and those students whose conduct is not within the policies of the University rules and regulations are subject to dismissal. Students are responsible for abiding by all published University rules and regulations. Failure to read publications will not excuse the student from the requirements and regulations described therein. The SRSU Student Handbook and other official University publications outline specific regulations and requirements.

