



NDREG 600: Regional Anesthesia Foundations Syllabus
Spring 2025
January 6 - April 17, 2025

COURSE NAME AND NUMBER: NDREG 600: Foundations of Regional Anesthesia

COURSE FACULTY:

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Response time to email and phone messages: Every attempt will be made to respond to your email, Teams message, or phone message within 24 hours. Please note that messages left after noon on Friday may not be retrieved until Monday morning.

Office Hours at MTSA: M–Th 8 am – 6 pm.

Please contact Mandy Kelly (mandy.kelly@mtsa.edu) to schedule an appointment.

COURSE DESCRIPTION:

The Regional Anesthesia Foundations Class is a comprehensive 15-week post-graduate course designed for CRNAs seeking to broaden their scope of practice by incorporating regional anesthesia. This course covers a wide variety of regional anesthesia related topics, including ultrasound principles, neuromuscular functional assessment, local anesthetic dosing, peripheral nerve blocks commonly used in the perioperative management of patients, and postoperative considerations. It combines online didactic lectures and interactive synchronous events to ensure a thorough learning experience. The course culminates in a hands-on cadaveric workshop, providing a practical application to reinforce your understanding of anatomy, physiology, and pharmacology specific to regional anesthesia.

COURSE CREDIT: 3 credit hours

REQUIRED TEXTS:

- Hadzic, A. (2017). [*Hadzic's Textbook of Regional Anesthesia and Acute Pain Management: Self-Assessment and Review*](#) (2nd ed.). McGraw Hill / Medical.
- Hadzic, A. (2021). [*Peripheral Nerve Blocks and Anatomy for Ultrasound-Guided Regional Anesthesia*](#) (3rd ed.). McGraw Hill / Medical.

- Karmakar, M. (2017). [*Atlas of Sonoanatomy for Regional Anesthesia and Pain Medicine*](#) (1st ed.). McGraw Hill / Medical.
- Hansen, JT. Netter's Anatomy Coloring Book (Netter Basic Science). (3rd Ed.). Elsevier; 2021.
- Hansen, JT. Netter's Anatomy Flash Cards (Netter Basic Science). (6rd Ed.). Elsevier; 2022.

SUGGESTED TEXTS OR ADDITIONAL SUGGESTED READING MATERIAL:

- Elisha, S., Heiner, J.S., Nagelhout, J.J. (2022). *Nurse Anesthesia* (7th ed). Elsevier.

COURSE OBJECTIVES:

1. Conduct an acute pain assessment while explaining the neurotransmitters and receptors associated with pain. (DSLO 5, 7, 8, 11, 13, 14, 15, 16, 17, 21, 23)
2. Demonstrate the proper set-up and of regional anesthesia and ultrasound equipment (DSLO 3, 11)
3. Compare and contrast spinal and epidural anesthesia. List the indications, contraindications, and pharmacologic considerations of each. (DSLO 11, 13, 14, 17, 22, 23)
4. Analyze the appropriate indications, contraindications, and pharmacologic considerations for each USGRA technique. (DSLO 11, 13, 14)
5. Describe the functional anatomy of each procedure. (DSLO 11)
6. Relate the sonoanatomy to the functional anatomy of each USRA procedure. (DSLO 3, 11)
7. Evaluate the appropriate local anesthetic concentration and volume, based on the USGRA block indication. (DSLO 11)
8. Demonstrate safe needling technique and verbalize optimal local anesthetic placement to avoid iatrogenic injury when performing USGRA techniques. (DSLO 3, 8, 11, 13, 14, 16, 17, 22)
9. Assess the risks, side-effects, and complications of the various regional anesthesia techniques. (DSLO 3, 11, 22)
10. Perform a neuromuscular assessment of the upper and lower extremities evaluating for muscular strength and the location of nerve lesions when deficits are present. (DSLO 8, 11)

LEARNING ACTIVITIES:

The format for the course is hybrid, with online lectures and assignments combined with live synchronous events. Learning assessments are administered throughout the course to demonstrate a mastery of the objectives. A grade of “C” is considered a passing grade for the course. Although the coursework is designed to be self-paced, there are required synchronous activities arranged by the course instructor.

Teaching Methods

- Voice over PowerPoint lectures
- Synchronous events via TEAMS
- End-of-module examinations
- Essentials of USGRA Cadaveric Workshop

GRADING SYSTEM:

Assignments	50%
Quizzes	25%
Synchronous Events	10%
Cadaveric Workshop	15%
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	100%

Written & Video Assignments (50%)

Students will submit written case presentations or video presentations prior to the end of module synchronous event detailing the perioperative pain management plan of a patient related to the module content. Students are expected to discuss their plans at the end of module synchronous events. All written assignments must include references.

Quizzes (25%)

The course contains end-of-module exams for students to demonstrate content mastery. To receive full credit, exams must be completed prior to the corresponding synchronous event.

Synchronous Event Attendance (10%)

At the end of each module, students are expected to attend on camera and participate in a live synchronous event with course faculty. If a student is unable to attend an online event, they must notify the course faculty at least 24 hours prior. To receive credit for a missed synchronous event, the student must watch the recording of the event and **submit a one-page paper relating the topic to their current clinical practice within 48 hours of the event**, written in AMA format, to include references.

Cadaveric Workshop (15%)

Students are required to attend an Essentials of USGRA Cadaveric Workshop at the end of the course. During the cadaveric workshop, students will complete a competency-based evaluation to demonstrate proficiency in safe ultrasound-guided regional anesthesia techniques.

Late Work:

Assignments submitted after the due date will receive a grade no higher than 80%. Failure to submit any assignment by end of course without a request for an extension will result in a failing grade. [Grading Policy](#)

GRADE OF INCOMPLETE (I)

If a student is unable to meet the requirements of a course by the end of the semester, the temporary grade of Incomplete (I) may be awarded by an instructor at the instructor's discretion. An incomplete grade requires written understanding between the instructor and student acknowledging when the course will be completed. To be awarded an Incomplete grade, the Incomplete Contract must be signed by the student, instructor, and Program Director and submitted to the Registrar's office by the last day of the semester.

The maximum time limit for submission of all course work necessary for removal of an incomplete is the end of the last day of classes of the following semester in which the incomplete was incurred (i.e. an incomplete awarded in the 2nd semester must be converted by the last day of classes in the 3rd semester). If the time limit passes and the course is not completed, the grade of incomplete is changed automatically to a failing grade. Any failing grade will result in termination from the program. A grade of incomplete is not calculated in the grade point average. No student may graduate with an Incomplete on their transcript.

Policies and Procedures**Non-Degree Course Grading Policy**

Students can view their final grades for each semester anytime by visiting the transcript section of the CAMS Student Portal <https://student.mtsa.edu/>.

The grading scale is based on the following 4.0 grading system:

A	90-100%	(4.0 Quality Points)
B	80-89.9%	(3.0 Quality Points)
C	70-79.9%	(2.0 Quality Points)
F	Below 70%	(0.0 – Failing)
W	Withdrew	See Grade of Withdrew below
WF	Withdrew Failing	See Grade of Withdrew Failing below
T	Terminated	See Terminated below

No grades, including final grades, will be rounded up.

(There is no grade of “D” in the Grading Scale)

Withdrawing from a Course

Students may drop a course within the first 5 MTSA business days of the semester with no grade.

Grade of Withdrew (W)

Students wishing to withdraw from the course after the first 5 MTSA business days of the semester will either receive a grade of “W” or “WF.” To receive a W grade, a student must drop the course within the first 60% of the semester. A “W” grade does not impact a student’s GPA.

Grade of Withdrew Failing (WF)

Students wishing to withdraw from the course after the deadline to withdraw with a “W” grade (see above) will receive a grade of “WF.” A WF grade is calculated into a student’s GPA as a failing grade (F).

Terminated (T)

An administratively terminated student is issued a final grade of "T" for all courses in which he/she is currently enrolled, and the termination is noted on the student's transcript.

Grade Appeal/Grievance Process:

Please refer to the *MTSA Student Handbook* for the Grade Appeal Policy (link below).

<https://mtsa-aspmf.cleancatalog.net/student-appeals>

Students are expected to respond to emails from MTSA staff and faculty within two MTSA business days.

Technical Support:

If you have problems with your computer, technology, IT-related questions, including those related to Brightspace, please contact the IT Team at itsupport@mtsa.edu or submit an [IT Support Request](#).

Non-Degree Course Refund Policy

Any student who wishes to withdraw from a community course must notify the instructor in writing of this action.

Refund Policy

MTSA will permit any student to cancel their enrollment agreement in a non-degree course within five MTSA business days of the enrollment day. Should a cancellation occur, MTSA will refund 100% of the tuition payment that was made by the student, minus the non-refundable portion (30%) submitted to hold the student's position in the class. Students withdrawing for medical reasons are assessed and adjusted no differently than other withdrawals.

Students who withdraw after this deadline will not receive a refund.

Determination of the Withdrawal Date

The student's withdrawal date is the date the student submits the signed withdrawal form to the Registrar's Office.

Administrative Withdrawal

Students may be administratively withdrawn from a course for non-attendance/participation. Any student who does not attend/participate in the course within 5 MTSA business days will be administratively withdrawn from the course.

Students will not receive a refund if Administratively Withdrawn.

MTSA Internal Withdrawal Procedure:

1. Notify in writing the instructor who will in turn notify the Program Director and Registrar of your intent to withdraw.
2. Schedule an appointment with the Executive Vice President if requested.
3. The Registrar sends the student the withdrawal form to complete and sign electronically.
4. After the student signs, the completed form is sent to the instructor for signature.
5. The withdrawal process will be initiated upon receipt of the completed withdrawal form.

Plagiarism, Cheating or Lying Involving Any Clinical, Academic, Or School Endeavor:

Any student cheating on any test, exam, quiz, or assignment; who has falsified clinical documents, such as clinical evaluations or any other documentation; falsified signatures; or who has plagiarized any assignment, will be placed on immediate probation, with the recommendation for termination from the program. The case will be heard by the Progressions Committee and the Committee will make a determination of the recommendation for termination.

Plagiarism, which is defined as “the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work,” is a form of cheating, and is subject to disciplinary action including termination.

Click the link below to review the Academic Integrity Policy in the Student Handbook.
<https://mtsa-aspmf.cleancatalog.net/academic-integrity-policy>

Honor Code:

As a student of Middle Tennessee School of Anesthesia, I will incorporate the principles of truth, honor, integrity, and virtue in all that I do while enrolled. I acknowledge the Honor Code as vital in fostering an environment of trust, order, and unity within the School. I accept the sacred trust placed in me to continue this heritage of honor in my efforts to become a competent nurse anesthetist. I freely pledge to abide by the MTSA Standards of Conduct and this Honor Code in all of my conduct. I understand that a violation of this Honor Pledge will result in disciplinary action up to and including dismissal from the program.

Click the link below to review the entire Honor Code in the Student Handbook.
<https://mtsa-aspmf.cleancatalog.net/honor-code>

Americans With Disabilities Statement:

MTSA complies with the Americans with Disabilities Act (ADA). To ensure equal opportunity for all qualified persons, students with documented disabilities requiring accommodation have access to support personnel within the Office of the Executive Vice President. An agent of this office will collaborate with other faculty and staff as necessary to provide reasonable accommodations for courses and examinations. Accommodations help qualified students with disabilities access resources to assist them in meeting the technical standards for nurse anesthesia program admission, continuation, and graduation.

Requests for accommodation of a disability must be made in a timely manner to the Office of the Executive Vice President. Accommodations provided by MTSA are not retroactive.

Students who receive accommodations are responsible for notifying instructors before beginning each course.

Click the link below to view the Accommodations Policy in the Student Handbook.
<https://mtsa-aspmf.cleancatalog.net/accommodation-requests>