

# MIDDLE TENNESSEE SCHOOL OF ANESTHESIA

## ACADEMIC COURSE SEQUENCING BY SEMESTER

### 2023 DNAP-COMPLETION Year 1: August 30, 2021 – August 28, 2022

<b>Semester</b>	<b>Course #</b>	<b>Course Name</b>	<b>Credit Hours</b>
1	DNAP 640	Quality Improvement & Patient Safety	4
1	DNAP 630	Informatics and Educational Curriculum, Instruction, Evaluation: Application & Practice	4
2	DNAP 650	Healthcare Policy, Business & Legal Issues	4
2	DNAP 660	Population Wellness & Health Promotion (Epidemiology)	4
3	DNAP 680	Leadership and Ethics in Nurse Anesthesia Practice	4
3	DNAP 600	Evidence Based Practice in Nurse Anesthesia I	4

**Total Credit Hours – Year 1: (24)**

### Year 2: August 29, 2022 – August 10, 2023

<b>Semester</b>	<b>Course #</b>	<b>Course Name</b>	<b>Credit Hours</b>
1	DNAP 620	Evidence Based Practice in Nurse Anesthesia II	3
2	DNAP 700	Evidence Based Practice in Nurse Anesthesia III	3
3	DNAP 710	Evidence Based Practice in Nurse Anesthesia IV	3

**Total Credit Hours – Year 2: (9)**

**Total Credit Hours: (33)**

## Elective Course Option

<b>Semester</b>	<b>Course #</b>	<b>Course Name and Description</b>	<b>Credit Hours</b>
1	ASPMF 600	Principles of Pharmacology and Acute Pain Management	3
1	ASPMF 610	ASPMF Clinical Practicum I	3
2	ASPMF 620	Techniques of Acute Pain Management	3
2	ASPMF 630	ASPMF Clinical Practicum II	3
3	ASPMF 640	Acute Pain Management Education, Business and Evidence-Based Practice	3
3	ASPMF 650	ASPMF Clinical Practicum III	3

**Total Credit Hours: (18)**

## Nurse Anesthesia Educator Courses

<b>Semester</b>	<b>Course #</b>	<b>Course Name</b>	<b>Credit Hours</b>
1		Theoretical Foundations in Education and the Nurse Anesthesia Educator Role	3
2		Teaching and Assessment Strategies for the Nurse Anesthesia Educator	3
3		Curriculum Development for the Nurse Anesthesia Educator	3
3		Nurse Anesthesia Educator Practicum (Optional)	2

**Total Credit Hours: (11)**

# DOCTOR OF NURSE ANESTHESIA PRACTICE (DNAP) COURSE CATALOG

## DNAP 600 Evidenced-Based Practice in Nurse Anesthesia I

(4 Credit Hours)

*Bill Johnson, DNAP, CRNA*

*Hallie Evans, DNP, CRNA, ARNP*

This course is the first of a four-part sequence that begins with the basics of review as to what constitutes evidence-based practice and the components for the translation of scholarly information into practice. At the culmination of these four courses each student will have completed a doctoral scholarly project and created an ePortfolio for their work throughout the program.

In this beginning course, the DNAP Completion Students will encounter opportunities to explore the conceptual, theoretical, and empirical foundations of nursing knowledge. Specific emphasis is placed on the research process and methods of identifying, conceptualizing, designing, implementing, evaluating, and translating evidenced-based research into practice. Both quantitative and qualitative research methods are explored and analyzed. The learner will be introduced to PICOT statements and how the question of inquiry guides the research.

This course also provides an overview of statistical analysis methods most often reported in healthcare research literature. Topics include descriptive and inferential univariate and multivariate parametric and nonparametric data analyses. Emphasis is placed on: 1) integrating all aspects of the research process to enhance rigor and the quality of evidence; 2) the appropriate use and critical assumptions of statistical analysis methods, 3) reasoned interpretation of research results, and 4) the systematic critical analysis and evaluation of published research studies.

*(COA DSLO: 1,2,3,8,12-18)*

## **DNAP 620 Evidenced-Based Practice in Nurse Anesthesia II**

(3 Credit Hours)

*Bill Johnson, DNAP, CRNA*

*Hallie Evans, DNP, CRNA, ARNP*

This course is the second of a four-part sequence that began with the basics of review in the translation of evidence to practice.

In this second course, the DNAP Completion Students will review and explore the foundational concepts necessary for critically evaluating and synthesizing theoretical and empirical knowledge. Each student will select a concept of interest related to nurse anesthesia clinical practice, nurse anesthesia student education, or administration/management of nurse anesthesia practice. The learner will be re-introduced to PICOT statements and how the question of inquiry guides the research. Students will then begin the process of selecting, analyzing, and synthesizing related theoretical and research literature. This course will provide the foundational knowledge and skills for the completion of the literature review and synthesis for the scholarly project.

*(COA DSLO: 1, 3,12-16)*

## **DNAP 630 Informatics, Education, Curriculum, Instruction, Evaluation: Application and Practice**

(4 Credit Hours)

*Bill Johnson, DNAP, CRNA*

This course is designed to facilitate expertise in the application of fundamental educational concepts of curriculum, instruction, and evaluation. An underlying focus for the DNAP student includes applying these educational concepts to a subset population of their DNAP project. These fundamental concepts will facilitate the DNAP student to become familiar with the educational concepts of a didactic or clinical educator in the nurse anesthesia program. Course content includes the process of a needs assessment, curriculum development, instruction, and evaluation as well as reflection.

Students also are provided an overview of informatics, the transformation of data into information, knowledge, decisions, and actions to improve outcomes. Topics include computer networks, information technology and systems, communications protocols, technology and data standards, information life-cycle, Internet, basic computer security including security management, management of IT services, interoperability, and their impact upon healthcare delivery and patient safety. Students will locate and critically analyze online resources for their relevancy, accuracy, and usage of evidence-based information. Policy and practice of healthcare informatics within ethical, regulatory, and legal frameworks are also examined.

*(COA DSLO: 17 & 18)*

## **DNAP 640 Quality Improvement & Patient Safety**

(4 Credit Hours)

*Katrin Sames, DNP, CRNA, APN*

This course is designed to provide opportunities to analyze, synthesize, and apply knowledge of quality improvement and patient safety in anesthesia practice. This course builds on behavioral, social, and organizational sciences. It will explore the theoretical basis of human error, introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis response management and monitoring systems in anesthesia practice. Further, this course will closely examine a wide range of scholarly publications targeting the broad domain of patient safety.

*(COA DSLO: III)*

## **DNAP 650 Healthcare Policy, Business & Legal Issues**

(4 Credit Hours)

*Chris Hulin, DNP, CRNA, APN*

This course focuses on public policy issues and how they relate to the nurse anesthesia profession. It will include an examination of the process of policy formation within the health care industry including origin, implementation, and analysis. The student will critically analyze a policy issue relating to their Capstone Phenomenon of Interest (if appropriate) using the policy review model of Equity, Efficiency, and Effectiveness (3 E's). Students will be prepared to assume leadership and influence of health policy development and advocacy for the patient and profession.

*(COA DSLO: 2,3,4,5,8-13)*

## **DNAP 660 Population Wellness & Health Promotion (Epidemiology)**

(4 Credit Hours)

*Katrin Sames, DNP, CRNA, APN*

Epidemiology focuses on the distribution and determinants of disease frequency in human populations. This course prepares the DNAP student to use epidemiological strategies to examine patterns of illness or injury in groups of people. Concepts of health, risk, and disease causality are examined. Implications for development of data based programs for disease/injury prevention and control as well as policy implications will be discussed.

*(COA DSLO: 2, 13)*

## **DNAP 680 Leadership and Ethics in Nurse Anesthesia Practice**

(4 Credit Hours)

*Michele Gravois, DNAP, CRNA, APN*

*Brent Dunworth, DNP, MBA, APRN, CRNA*

This course is designed to examine foundational Christian ethical principles relative to biomedical care, and to appropriately utilize these in the healthcare arena. The course presents a broad overview of basic moral principles, while focusing in-depth on ethical foundations from a Biblical perspective. The course is introduced with a review of philosophical foundations of applied and professional ethics, including ethical decision making. Students will engage in an in-depth study of how they can develop as successful organizational leaders. The strengths and weaknesses of various leadership approaches are compared. Other course topics may include the Biblical teaching on leadership, economic and financial dimensions of leadership, systems thinking, and leading teams. Students are required to obtain hands-on leadership experience during the course as part of the course requirements.

(COA DSLO: 3,6 & 7)

## **DNAP 700 Evidenced-Based Practice in Nurse Anesthesia III**

(3 Credit Hours)

*Bill Johnson, DNAP, CRNA*

*Hallie Evans, DNP, CRNA, ARNP*

This course is the third of a four-part sequence that began with the basics of review in the translation of evidence to practice.

In this third course, the DNAP Completion Students will be assigned to a small group and the group will discover and participate in analyzing and critiquing clinical practice guidelines, identify a clinical problem, reviewing, analyzing, and synthesizing the literature, create recommendations for solving the clinical problem based on the evidence. The culmination of this course will result in the group creating a poster of their findings and recommendations to present at the next TANA meeting. This course provides the foundational knowledge and skills for the completion of the small group scholarly projects.

(COA DSLO: 2,3,4,6,7,12 & 16)

## **DNAP 710 Evidenced-Based Practice in Nurse Anesthesia IV**

(3 Credit Hours)

*Bill Johnson, DNAP, CRNA*

*Hallie Evans, DNP, CRNA, ARNP*

This four-course sequence relates to components of the DNAP Completion Program scholarly project. The Evidence-Based Practice course sequence began with review of fundamental concepts and theories related to scholarly endeavors as well as provided an overview of statistical analysis methods most often reported in healthcare research literature.

Each student group will identify a salient, specific problem related to clinical nurse anesthesia practice; education of nurse anesthesia students, colleagues, patients/families, or the public about some specific aspect of anesthesia; or business administration/management of anesthesia practice. The student group will perform a research literature review; explicate the framework/model of the problem; critically analyze, integrate, and evaluate related research; and synthesize the body of knowledge. Specific recommendations will be made by the group for applications to evidence-based nurse anesthesia clinical practice, education, or business administration/management. The student group with guidance and supervision by their Faculty, both process and content, will create a proposal for a Nurse Anesthesia improvement project derived from the evidence. The student group will create a plan for a quality improvement project or will implement a project and critically analyze the outcome/findings. Additional research needed to expand understanding of the problem will be proposed.

The final outcome/product of a scholarly paper will be presented to the faculty and peers in a formal, scholarly, paper or poster or other approved platform. Additional dissemination of outcome/findings may include presentations at local, regional, or national nurse anesthesia conferences; and/or submission of a manuscript to an appropriate professional journal.

(COA DSLO: 2,3,4,6,7,12 & 16)

## **ASPMF 600 Foundations of Acute Pain Management**

(3 Credit Hours as elective only)

*Bill Johnson, DNAP, CRNA*

This course is the first offering, in a series of (3) elective courses, of content related to the acute pain management of patients experiencing surgical pain. The trajectory of the course is pre-determined in that students will successfully complete (3) Acute Pain Management courses in a sequential order.

This course guides the through salient aspects in the evaluation and treatment of acute surgical pain management. Within the context of legal, ethical and professional standards, the student will incorporate non-allopathic and pharmacological interventions in planning for optimal outcomes for patients in surgical pain or about to undergo surgery. In depth content on the physiological aspects of pain is covered and is essential in the ability to assess client pain, and evaluate of pain management interventions. Strategies to ameliorate client pain are explored in the cases where initial interventions are deemed insufficient.

(COA DSLO 1,2, 12,13,14,17)

## **ASPMF 620 Techniques of Acute Pain Management**

(3 Credit Hours as elective only)

*Bill Johnson, DNAP, CRNA*

This course is the second offering, in a series of (3) elective courses, of content related to the Acute Pain Management of patients experiencing surgical pain. The trajectory of the course is pre-determined in that students will successfully complete (3) Acute Pain Management courses in a sequential order as elective credit in the DNAP-C program.

This course builds upon the concepts introduced in course one, Foundation of Acute Pain Management, and guides the student into techniques for administering regional anesthesia in patients experiencing acute surgical pain, or about to experience acute surgical pain. Beginning with principles of ultrasound physics, the student is led through techniques involving neuraxial techniques involving spinal and epidural anesthesia, truncal techniques, techniques to anesthetize upper and lower extremities, and indications for perineural catheter use and choices. The course concludes with strategies to identify and management complications that can occur during and after the administration of regional anesthesia.

(COA DSLO: 1, 2 12, 13, 14, 18 )

## **ASPMF 640 Acute Pain Management Education, Business and Evidence Practice**

(3 Credit Hours as elective only)

*Bill Johnson, DNAP, CRNA*

This course is the final offering, in a series of (3) elective courses, of content related to the Acute Pain Management of patients experiencing surgical pain. The trajectory of the course is pre-determined in that students will successfully complete (3) Acute Pain Management courses in a sequential order as elective credit in the DNAP-C program.

This course facilitates the Student's ability to teach content related to Acute Pain Management utilizing best practices in teaching and mentoring others. The course incorporates evidence into the realm of acute pain management to assure that best practices in the delivery of anesthetic care is well founded in research and current guidelines. Students are guided in the use and creation of enhanced recovery after surgery (ERAS) protocols. Students will explore multimodal perioperative care pathways to achieve early recovery after surgical procedures by maintaining preoperative organ function and reducing the profound stress response following surgery. Students will explore foundational business principles and policies related to acute pain management services, and skills needed to create a pain management service.

*(COA DSLO: 1-5, 8-18)*

### **NE XXX Theoretical Foundations in Education and the Nurse Educator Role**

(3 Credit Hours as elective only)

*Elizabeth Murray PhD, RN CNE*

Students are introduced to the Nurse Educator Role. This course explores educational theories, philosophies, and conceptual frameworks in education. Selected teaching and learning theories are examined in the context of nurse anesthesia education. Students will engage in activities to identify their own learning style and how to use teaching and learning styles to help students meet learning outcomes. Students will engage in activities that promote socialization to the academic nurse educator role, emphasize the importance of leadership development in higher education, and functioning as a change agent within the nursing program, institution, and community. In addition, ethical and legal considerations for the nurse educator are explored.

### **NE XXX Teaching and Assessment Strategies for the Nurse Educator**

(3 Credit Hours as elective only)

*Elizabeth Murray PhD, RN CNE*

This course builds on the theories, philosophies, and conceptual frameworks learned in Course 1 and guides the student in developing effective, evidence-based teaching strategies to address various student learning styles in diverse settings. Teaching methods that promote productive and supportive learning environments are explored. Students will gain an understanding of how to use and integrate a variety of technology tools as they prepare to deliver educational offerings in the classroom, online, and clinical settings. Various formative and summative evaluation strategies for assessment of learning and attainment of student learning outcomes in the classroom, clinical, and laboratory settings is also addressed.

### **NE XXX Curriculum Development for the Nurse Educator**

(3 Credit Hours as elective only)

*Elizabeth Murray PhD, RN CNE*

This course provides students with the fundamental knowledge and skills necessary to effectively design, develop, implement, and evaluate nursing education focused curricula. Current trends and issues that can influence curriculum development and revision are examined. Students will analyze the components of nurse programs and develop a plan for evaluating a nursing program. Current trends in nursing education and accreditation are also explored.

### **NE XXX Nurse Educator Practicum**

(3 Credit Hours as elective only)

*Bill Johnson DNAP, CRNA and MTSA Faculty/Administration*

This optional course provides students opportunities to synthesize knowledge from previous courses and explore the role of the nurse anesthesia educator. Students will apply theories and concepts in curriculum development, evaluation, various teaching strategies, and assessment of student learning in diverse teaching/learning environments with a focus on nurse anesthesia education. Through the Nurse

Anesthesia Educator Practicum, students will apply theoretical principles of education in implementing the nurse anesthesia educator role. Students will create and implement a personalized practicum experience under the supervision of faculty/preceptors in various teaching/learning environments.

**NE XXX Education and the Clinical Mentor Specializing in Acute Pain Management**

(2 Credit Hours as elective only)

Elizabeth Murray PhD, RN CNE

Students are introduced to the Nurse Anesthesia Educator Role as it relates to Clinical Education. This course explores educational theories, philosophies, and conceptual frameworks in education. Selected teaching and learning theories are examined in the context of nurse anesthesia education. Students will engage in activities to identify their own clinical learning style and how to use teaching and learning styles to help students meet learning outcomes. Students will gain an understanding of how to use and integrate a variety of technology tools as they prepare to deliver educational offerings in the clinical setting. Various formative and summative clinical evaluation strategies for assessment of learning and attainment of student learning outcomes in the clinical and laboratory settings are also addressed.