TABLE OF CONTENTS

ASPMF 700-770: ACUTE SURGICAL PAIN MANAGEMENT COURSES

ASPMF 700: FOUNDATIONS OF ACUTE PAIN MANAGEMENT

This is the first in a series of five courses related to the perioperative management of pain. This course focuses on key aspects of acute surgical pain, including micro and functional neuroanatomy, the pathophysiology of pain, and neuromuscular assessment. Physiological aspects of pain are examined through direct clinical assessment and pain management interventions within the context of legal, ethical, and professional standards. Non-allopathic strategies to reduce pain are explored in situations where initial interventions are ineffective as well as the cultural and spiritual aspects of pain.

Credits: 3.00

ASPMF 710: ESSENTIAL ULTRASOUND-GUIDED REGIONAL ANESTHESIA TECHNIQUES IN ACUTE PAIN MANAGEMENT

This is the second in a series of five courses related to the perioperative management of pain. This course focuses on essential regional anesthesia techniques commonly used to optimize patient outcomes as either a primary anesthetic or as part of a multimodal pain management plan. Ultrasound physics and principles are discussed as well as the role of ultrasound-guidance in regional anesthesia. The indications, functional anatomy, sonoanatomy, common dosing regimens, and risks and complications of neuraxial procedures, superficial cervical plexus blocks, upper extremity peripheral nerve blocks, lower extremity peripheral nerve blocks, and truncal techniques are reviewed. Additional safety measures such as nerve stimulation and injection pressure monitor are also examined. Credits: 3.00

ASPMF 720: CLINICAL PRACTICUM I

This is the first course in a sequence of three to improve the fellow's knowledge and skill in acute pain management practices throughout the perioperative period. Fellows attend an on-campus intensive covering all aspects of essential ultrasound-guided regional anesthesia procedures to include anatomist-guided cadaveric dissections, needling practice on whole-body cadavers, live model scanning, and neuromuscular assessment. This knowledge is translated into clinical practice during clinical rotations at affiliate sites under the mentorship of preceptors.

Credits: 1.00

ASPMF 730: ADVANCED ULTRASOUND-GUIDED REGIONAL ANESTHESIA TECHNIQUES IN ACUTE PAIN MANAGEMENT

This is the third in a series of five courses related to the perioperative management of pain. This course focuses on advanced regional anesthesia techniques used to optimize patient outcomes as either a primary anesthetic or as part of a multimodal pain management plan in situations when commonly used procedures are not possible because of patient comorbidities or the surgical procedure. The role of regional anesthesia for non-surgical pain management is examined as well as the utility point-of-care ultrasound (POCUS) studies in the perioperative management of patients.

Credits: 3.00

ASPMF 740: Principles of Pharmacology in Acute Pain Management

This is the fourth in a series of five courses related to the perioperative management of pain. This course begins with a review of drug pharmacokinetics and pharmacodynamics and the emerging field of pharmacogenomics, followed by an in-depth look at the local anesthetics, opioids, and adjuvants used in acute pain management. The role of multimodal pain management and enhanced recovery after surgery (ERAS) protocols to facilitate improved outcomes following surgical procedures is discussed as well as the management of the chronic opioid patient experiencing acute pain. Finally, the impact of antithrombic therapy on regional anesthesia and strategies to optimize outcomes while minimizing risk is examined.

Credits: 3.00

ASPMF 750: CLINICAL PRACTICUM II

This is the second course in a sequence of three to improve the fellow's knowledge and skill in acute pain management practices throughout the perioperative period. Fellows attend an on-campus intensive covering all aspects of advanced ultrasound-guided regional anesthesia procedures to include anatomist-guided cadaveric dissections, needling practice on whole-body cadavers, live model scanning, and neuromuscular assessment. This knowledge is translated into clinical practice during rotations at affiliate sites under the mentorship of preceptors.

Credits: 1.00

ASPMF 760: ACUTE PAIN MANAGEMENT EDUCATION, BUSINESS, AND EVIDENCE-BASED PRACTICE

This is the final course in a sequence of five related to the perioperative management of pain. This course introduces the student to evaluating best evidencebased practices in the field of acute pain management. Current literature and evidence-based practices are examined and critiqued to determine if current anesthetic practices are supported by research. Specialty areas such as pediatric considerations and the management of chronic pain are investigated. Students also review the essential ethical, legal, public policy, and business principles needed to provide acute pain management services and learn the skills necessary to create a pain management team. Finally, the course introduces students to best practices in mentoring and educating others in the field of acute pain management.

Credits: 3.00

ASPMF 770: CLINICAL PRACTICUM III

This is the final course in a sequence of three to improve the fellow's knowledge and skill in acute pain management practices throughout the perioperative period. Knowledge gained throughout Fellowship courses and hands-on intensives is translated into clinical practice during rotations at affiliate sites under the mentorship of preceptors.

Credits: 1.00

DNAP 600-710: DNAP COMPLETION COURSES

DNAP 600: EVIDENCED-BASED PRACTICE IN NURSE ANESTHESIA I

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.

Credits: 4.00

DNAP 620: EVIDENCED-BASED PRACTICE IN NURSE ANESTHESIA II

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.

Credits: 3.00

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

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.

Credits: 4.00

DNAP 640: Quality Improvement & Patient Safety

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.

Credits: 4.00

DNAP 650: HEALTHCARE POLICY, BUSINESS & LEGAL ISSUES

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.

Credits: 4.00

DNAP 660: POPULATION WELLNESS & HEALTH PROMOTION (EPIDEMIOLOGY)

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 patters 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.

Credits: 4.00

DNAP 680: Leadership and Ethics in Nurse Anesthesia Practice

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.

Credits: 4.00

DNAP 700: EVIDENCED-BASED PRACTICE IN NURSE ANESTHESIA III

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.

Credits: 3.00

DNAP 710: EVIDENCED-BASED PRACTICE IN NURSE ANESTHESIA IV

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 evidencebased 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.

Credits: 3.00