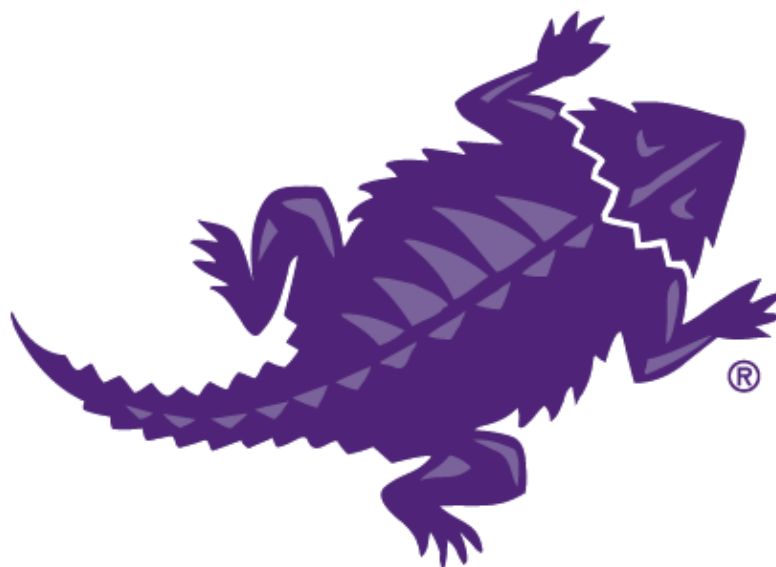




Doctor of Nursing Practice-Anesthesia Clinical Project Guide



Class of 2020 Edition



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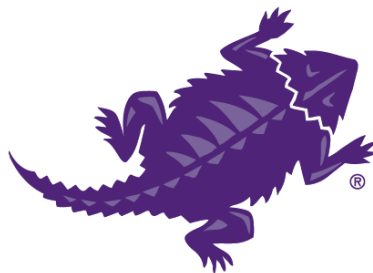
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Section I

DNP-A Clinical Project

Philosophy
Project Overview
Faculty Interests
Faculty Advising

DNP-A Clinical Project Philosophy and Purpose

The DNP-A Clinical Project is about process and product, both aspects carry equal importance. The DNP-A Clinical Project process is organized and well-delineated to guide the clinically oriented doctoral student to incorporate specific knowledge and skill sets that ultimately improve healthcare delivery, clinical practice, and patient care. The School of Nurse Anesthesia (SoA) Clinical Projects adhere to The Essentials of Doctoral Education for Advanced Nursing Practice put forth by the American Association of Colleges of Nursing (AACN)¹ as well as the goals, requirements, and competencies of the Council on Accreditation of Nurse Anesthesia Educational Programs (COA).²

AACN Final DNP Project

“Doctoral education, whether practice or research, is distinguished by the completion of a specific project that demonstrates synthesis of the student’s work and lays the groundwork for future scholarship. For practice doctorates, requiring a dissertation or other original research is contrary to the intent of the DNP. The DNP primarily involves mastery of an advanced specialty within nursing practice. Therefore, other methods must be used to distinguish the achievement of that mastery. Unlike a dissertation, the work may take a number of forms.”¹ One example of a final DNP project is a practice change initiative. This may be represented by a pilot study, a program evaluation, a quality improvement project, an evaluation of a new practice model, a consulting project, or an integrated systematic literature review. Additional examples of a DNP final product include a research utilization project, practice topic dissemination, substantive involvement in a larger endeavor, or other practice project. A DNP project would be expected to include a manuscript submitted for publication. The theme that links these forms of scholarly experiences is the use of evidence to improve either practice or patient outcomes incorporating synthesis and scholarship.¹

“The final DNP project produces a tangible and deliverable academic product that is derived from the practice immersion experience and is reviewed and evaluated by an academic committee.

The final DNP product documents outcomes of the student's educational experiences, provides a measurable medium for evaluating the immersion experience, and summarizes the student's growth in knowledge and expertise. The final DNP product should be defined by the academic unit and utilize a form that best incorporates the requirements of the specialty and the institution that is awarding the degree. Whatever form the final DNP product takes, it will serve as a foundation for future scholarly practice."¹

Essentials of Doctoral Education for Advanced Nursing Practice provide the framework for assessment of outcome competencies.¹

I. Scientific Underpinnings for Practice

The DNP program prepares the graduate to:

- A. Integrate nursing science with knowledge from ethics, the biophysical, psychosocial, analytical, and organizational sciences as the basis for the highest level of nursing practice.
- B. Use science-based theories and concepts to:
 1. determine the nature and significance of health and health care delivery phenomena;
 2. describe the actions and advanced strategies to enhance, alleviate, and ameliorate health and health care delivery phenomena as appropriate; and evaluate outcomes.
- C. Develop and evaluate new practice approaches based on nursing theories and theories from other disciplines.

II. Organizational and systems leadership for quality improvement and systems thinking

The DNP program prepares the graduate to:

- A. Develop and evaluate care delivery approaches that meet current and future needs of patient populations based on scientific findings in nursing and other clinical sciences, as well as organizational, political, and economic sciences.
- B. Ensure accountability for quality of health care and patient safety for populations with whom they work.
 1. Use advanced communication skills/processes to lead quality improvement and patient safety initiatives in health care systems.
 2. Employ principles of business, finance, economics, and health policy to develop and implement effective plans for practice-level and/or system-wide practice initiatives that will improve the quality of care delivery.
 3. Develop and/or monitor budgets for practice initiatives.
 4. Analyze the cost-effectiveness of practice initiatives accounting for risk and improvement of health care outcomes.
 5. Demonstrate sensitivity to diverse organizational cultures and populations, including patients and providers.
- C. Develop and/or evaluate effective strategies for managing the ethical dilemmas inherent in patient care, the health care organization, and research.

III. Clinical scholarship and analytical methods for evidence-based practice

The DNP program prepares the graduate to:

- A. Use analytic methods to critically appraise existing literature and other evidence to determine and implement the best evidence for practice.
- B. Design and implement processes to evaluate outcomes of practice, practice patterns, and systems of care within a practice setting, health care organization, or community against national benchmarks to determine variances in practice outcomes and population trends.
- C. Design, direct, and evaluate quality improvement methodologies to promote safe, timely, effective, efficient, equitable, and patient-centered care.
- D. Apply relevant findings to develop practice guidelines and improve practice and the practice environment.
- E. Use information technology and research methods appropriately to:
 1. collect appropriate and accurate data to generate evidence for nursing practice

2. inform and guide the design of databases that generate meaningful evidence for nursing practice
 3. analyze data from practice
 4. design evidence-based interventions
 5. predict and analyze outcomes
 6. examine patterns of behavior and outcomes
 7. identify gaps in evidence for practice
- F. Function as a practice specialist/consultant in collaborative knowledge-generating research.
- G. Disseminate findings from evidence-based practice and research to improve healthcare outcomes

IV. Information systems/technology and patient care technology for the improvement and transformation of health care

The DNP program prepares the graduate to:

- A. Design, select, use, and evaluate programs that evaluate and monitor outcomes of care, care systems, and quality improvement including consumer use of health care information systems.
- B. Analyze and communicate critical elements necessary to the selection, use and evaluation of health care information systems and patient care technology.
- C. Demonstrate the conceptual ability and technical skills to develop and execute an evaluation plan involving data extraction from practice information systems and databases.
- D. Provide leadership in the evaluation and resolution of ethical and legal issues within healthcare systems relating to the use of information, information technology, communication networks, and patient care technology.
- E. Evaluate consumer health information sources for accuracy, timeliness, and appropriateness.

V. Health care policy for advocacy in health care

The DNP program prepares the graduate to:

- A. Critically analyze health policy proposals, health policies, and related issues from the perspective of consumers, nursing, other health professions, and other stakeholders in policy and public forums.
- B. Demonstrate leadership in the development and implementation of institutional, local, state, federal, and/or international health policy.
- C. Influence policy makers through active participation on committees, boards, or task forces at the institutional, local, state, regional, national, and/or international levels to improve health care delivery and outcomes.
- D. Educate others, including policy makers at all levels, regarding nursing, health policy, and patient care outcomes.
- E. Advocate for the nursing profession within the policy and healthcare communities.
- F. Develop, evaluate, and provide leadership for health care policy that shapes health care financing, regulation, and delivery.
- G. Advocate for social justice, equity, and ethical policies within all healthcare arenas.

VI. Interprofessional collaboration for improving patient and population health outcomes

The DNP program prepares the graduate to:

- A. Employ effective communication and collaborative skills in the development and implementation of practice models, peer review, practice guidelines, health policy, standards of care, and/or other scholarly products.
- B. Lead interprofessional teams in the analysis of complex practice and organizational issues.
- C. Employ consultative and leadership skills with intraprofessional and interprofessional teams to create change in health care and complex healthcare delivery systems.

VII. Clinical prevention and population health for improving the nation's health

The DNP program prepares the graduate to:

- A. Analyze epidemiological, biostatistical, environmental, and other appropriate scientific data related to individual, aggregate, and population health.
- B. Synthesize concepts, including psychosocial dimensions and cultural diversity, related to clinical prevention and population health in developing, implementing, and evaluating interventions to address health promotion/disease prevention efforts, improve health status/access patterns, and/or address gaps in care of individuals, aggregates, or populations.
- C. Evaluate care delivery models and/or strategies using concepts related to community, environmental and occupational health, and cultural and socioeconomic dimensions of health.

VIII. Advanced nursing practice

The DNP program prepares the graduate to:

- A. Conduct a comprehensive and systematic assessment of health and illness parameters in complex situations, incorporating diverse and culturally sensitive approaches.
- B. Design, implement, and evaluate therapeutic interventions based on nursing science and other sciences.
- C. Develop and sustain therapeutic relationships and partnerships with patients (individual, family or group) and other professionals to facilitate optimal care and patient outcomes.
- D. Demonstrate advanced levels of clinical judgment, systems thinking, and accountability in designing, delivering, and evaluating evidence-based care to improve patient outcomes.
- E. Guide, mentor, and support other nurses to achieve excellence in nursing practice.
- F. Educate and guide individuals and groups through complex health and situational transitions.

Use conceptual and analytical skills in evaluating the links among practice, organizational, population, fiscal, and policy issues.

DNP-A Clinical Project Overview

The DNP-A clinical project may vary in its form and focus but is always based on use of evidence to improve either practice or patient outcomes incorporating synthesis and scholarship. Evidence-based practice embodies the philosophical underpinning for all DNP-A clinical projects. Evidence-based practice is a process that includes locating, appraising, and applying quality scientific evidence.³ Evidence-based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.^{3,4} The RRNA uses the portfolio process to gain new knowledge from primary research, translate existing research findings, and/or focus on implementing known best practices. Application of evidence-based methodology through the translation of research, evaluation of practice, and collaboration results in improvement of healthcare practice and outcomes.⁵

There are two types of DNP-A clinical projects:

1. Synthesis focused project: Joanna Briggs Institute systematic review (www.joannabriggs.org)

2. Case study focused project consists of in-depth clinical case studies and extensive reflective self-evaluations.

DNP-A clinical project objectives:

The DNP-A clinical project is a scholarly process that will assist the DNP-A student to:

- Appraise evidence to implement the best evidence for practice
- Develop an evidence-based project through problem identification, proposal development, implementation, and evaluation
- Design processes to evaluate outcomes of practice and systems of care
- Use information technology systems for storage and retrieval of data
- Apply analytical methodology to synthesize existing literature relevant to nurse anesthesia practice
- Disseminate project results in a professional manner both written and orally
- Develop strategies to translate research into practice

All DNP-A students will compile documents and artifacts from coursework throughout the program into an electronic portfolio (FrogFolio, Digication). Items for inclusion in the portfolio will differ between students selecting the synthesis focused project and students selecting the case study focused project. See Timelines.

Note: the DNP-A portfolio is hosted by FrogFolio, Digication. This is NOT the portfolio within the TCU Online platform.

SoA DNP-A Project Faculty

Doctoral Project Coordinator: Dru Riddle, PhD, DNP, CRNA

Ron Anderson, MD

Associate Professor of Professional Practice

BS (University of Texas) 1981; MD (Texas Tech University School of Medicine) 1987
Project interests include obstetric and regional anesthesia, pain management, impaired cognitive development following fetal or early childhood anesthetic exposure, medical ethics, effective healthcare resource utilization, obstructive sleep apnea, and perioperative medical optimization.

Dennis J. Cheek, PhD, RN, FAHA (secondary advisor on committee)

Professor

BSN (California State University, Fresno), 1982; MSN (University of California, San Francisco), 1988; PhD (University of Nevada, Reno), 1996;
Project interests include cellular & biological Sciences, the genetic/genomic cellular/tissue expressions and subsequent clinical presentation, the role of functioning endothelial cells and subsequent causative factors involved in the development of dysfunctional endothelial cells including the genetic and genomic implications, the role of HSP72 in acute heat shock as well as heat acclimation during bouts of exercise. Clinical Interests: cardiovascular disease in women and men, disparities in risk factors, clinical presentations and treatment of men and women with heart disease, the role of hormones in heart disease, the role of aerobic versus resistive exercise as a preventive measure in the development of heart disease.

M. Roseann Diehl, PhD, DNP, CRNA

Associate Professor of Professional Practice

BSN (University of Texas), 1987; MHS (Texas Wesleyan University), 1997; DNP (Texas Christian University), 2010

Project interests include systematic reviews and clinical projects related to simulation, anesthesia crisis resource management, debriefing, nurse anesthesia education, regional anesthesia and portfolio management.

Linda Harrington, PhD, DNP, RN (secondary advisor on committee)

Adjunct Professor.

BSN (University of Texas Health Science Center at San Antonio), 1981; MSN (University of Texas at Arlington), 1984; PhD (Texas Woman's University). 1987; Post-graduate Certificate Program in Pain Management (University of California at San Francisco), 2007; Post-masters Certificate in Nursing Informatics (Duke University), 2010; Doctor of Nursing Practice (Duke University), 2012.

Project interests include: informatics, evidence-based practice, quality improvement, research.

James Holcomb, DNP, CRNA

Assistant Professor of Professional Practice

BA (Texas Tech University), 1993; Diploma (Methodist Hospital School of Nursing, Lubbock), 1995; BSN (West Texas A & M University), 1997; MHS (Texas Wesleyan University), 1998; Certificate in Nurse Anesthesia (Texas Wesleyan University), 1999; DNP (Texas Christian University), 2012.

Vaughna Galvin, DNAP, CRNA

Assistant Professor of Professional Practice

BSN (Barton College), 1997; MA (East Carolina University), 2002; MSNA, (Texas Christian University), 2005; DNAP, (Virginia Commonwealth University), 2011. Project interests include: Preoperative cardiovascular and pulmonary testing, exercise physiology, crisis resource management, critical scenario simulation, and healthcare resource utilization.

Timothy T. Gollaher, DNP, CRNA

Associate Director, Professor of Professional Practice

Diploma (Methodist Hospital School of Nursing, Lubbock), 1978; BSN (West Texas State University), 1993; MHS (Texas Wesleyan University), 1995; Certificate in Nurse Anesthesia (Texas Wesleyan University), 1996; DNP (Texas Christian University), 2012.

Project interest include: Systematic reviews with a focus on pharmacology of anesthetic agents and adjuncts, intraoperative fluid management, blood component therapy cardiac anesthesia, and neuroanesthesia.

Monica L. Jenschke, PhD, CRNA

Associate Professor of Professional Practice

Clinical Coordinator, Advanced Pain Management Fellowship.

BSN (University of Texas Health Science Center School of Nursing at San Antonio), 1987; MHS (Texas Wesleyan University), 1993; Certificate in Nurse Anesthesia (Texas Wesleyan University), 1994; PhD (University of North Texas Health Science Center at Fort Worth), 2009.

Project interests include: The effect of aging on postoperative pain, use of multimodal analgesia/anesthesia techniques, NMDA antagonists in reducing opioid tolerance and opioid-induced hyperalgesia, perioperative fluid management, pharmacology, incorporation of TeamSTEPPS into healthcare culture, and fostering health and wellness in nurse anesthesia.

Hylida Nugent, DNP, CRNA

Assistant Dean Harris College, Professor of Professional Practice

BSN (Northeast Louisiana University), 1986; MHS (Texas Wesleyan University), 1988. Certificate in Nurse Anesthesia (Texas Wesleyan University), 1989; DNP (Texas Christian University), 2009.

J. Dru Riddle, PhD, DNP, CRNA*Associate Professor of Professional Practice*

BSN (Virginia Commonwealth University), 1999; MSN (Old Dominion University), 2002; DNP (Texas Christian University), 2011.

Project interests include: OB anesthesia (high risk OB patient management), neuroanesthesia, anesthesia pharmacology, perioperative blood and fluid management, preoperative evaluation, evidence-based practice, implementation science, cost-effectiveness analysis, cost-benefit analysis, JBI/systematic reviews (clinical and economic), international anesthesia practice, healthcare economics, and healthcare policy.

Mike A. Sadler, DNP, CRNA*Assistant Professor of Professional Practice*

BSN (University of Texas, System School of Nursing, Fort Worth), 1974; Certificate in Nurse Anesthesia (Baylor University Medical Center) 1978; MSNA (Texas Christian University), 2004; DNP (Texas Christian University), 2012.

Project interests include: Anesthesia technology, monitoring, workstations, simulation.

Kay K. Sanders, DNP, CRNA*Director, Professor of Professional Practice*

BA (Tulane University), 1965; BS (Texas Woman's University), 1980; MHS (Texas Wesleyan University), 1983; Certificate in Nurse Anesthesia (Texas Wesleyan University) 1984; DNP (Texas Christian University), 2009.

Project interests include: education and practice issues, general and regional anesthesia techniques, pharmacology of anesthetic agents, anesthesia considerations with the obese and those with allergies.

Mark Welliver, DNP, CRNA*Professor of Professional Practice*

BSN (West Chester University), 1982; MS (St. Joseph's University), 1997; Certificate in Nurse Anesthesia (Pennsylvania Hospital), 1997; DNP (Texas Christian University), 2009.

Project interests include: Technology, pharmacology and clinical care. Pharmacology interests include neuromuscular blocking agents, reversal agents, and volatile anesthetics, tutorials, educational module creation and cost effectiveness analysis. Dissemination of projects or works by publication is encouraged.

Faculty Advising

Doctoral-prepared faculty in the school of nurse anesthesia will serve as primary advisors. The student may request a particular faculty member to be their primary advisor. The final approval of advisor assignment rests with the DNP-A Clinical Project Coordinator and Program Director. Both faculty and students have specific responsibilities toward the progress of the project. Communication is extremely important throughout the entire project process and is the student's responsibility. The timeline and deadlines of each project are designed to facilitate continual progress. Failure to meet requirements and deadlines may jeopardize timely completion. Delays

or omissions in the timeline must be clearly discussed with faculty advisor and resolved. All projects are to be completed on time to avoid graduation delays. Some specific responsibilities of student and faculty are listed below:

Student responsibilities:

- Communicate regularly with committee members via in-person, phone, video-conference (VTC), and/or email. Keep all documentation of communications and replies for records.
- Closely follow the timeline for projects completing each requirement completely and on time.

Faculty responsibilities:

- Respond to student communications in a timely fashion.
- Provide, at a minimum, semester progress feedback, guidance, and evaluation.
- Communicate and coordinate student progress with project coordinator. Provide guidance and feedback in construction of poster presentation for the annual Research Symposium held in late April or early May.
- Provide guidance and feedback for progression of Clinical Projects: Synthesis focused or case study focused projects.

Section II

DNP-A Clinical Project

Nursing Review Board (NRB) Harris College of Nursing & Health Sciences

All DNP-A projects require approval from the HCNHS NRB before the student can proceed with each project. NRB approval is required for all DNP-A clinical projects. Students will disseminate their findings by poster presentation, coursework, and possibly publication. *Completion of training that addresses ethical issues involved with research is a prerequisite and must be completed prior to submitting an application for NRB approval.*

Please visit the Harris Research website for information and forms required for each project NRB submission and approval. Allow at least 4 – 6 weeks for NRB approval, as this committee meets monthly. The NRB may request changes to the student's submitted protocol. Changes in the student's project should be made promptly, as it can take time for final IRB approval.

Harris College of Nursing and Health Sciences Research Web site:
<https://harrisresearch.tcu.edu/>.

Forms for NRB submission and approval are available at
<https://harriscollege.tcu.edu/research/student-research/>
Located on the Harris College Research Web site, student research, nursing NRB forms.

Scroll down to Nursing NRB Forms.
Download and complete 1) the Nursing Decision Checklist and 2) Non-Human Subject Student Application Form.

Nursing NRB Forms

Overview of NRB Process

NRB Pathway Document

Nursing Decision Checklist

Non-Human Subject Student Application Form

Section III

Synthesis Focused Project

JBI Systematic Reviews: two students are required to work together on a JBI Review project

What is a synthesis focused project?

The term synthesis refers to combining elements or parts to form a coherent whole. Synthesis is the key aspect of a systematic review. A synthesis project utilizes a rigorous scientific approach to combine results from a body of knowledge (original research) into a clinically meaningful whole.^{3,6} Synthesis projects put information together to gain greater understanding and direction pertaining to a particular subject.

A SoA DNP-A synthesis focused project represents the culmination of the formal process that collects, organizes, evaluates, critiques, analyses, interprets, applies, and evaluates an aspect(s) of clinical practice to influence improved patient care and/or outcomes. The format used for the TCU SoA synthesis focused project is the Joanna Briggs Institute systematic review.⁷

STEP 1

Topic Identification

Topic selection is an important step in developing the synthesis project and can be a time consuming process but should be performed with diligence and perseverance. The doctoral student will identify a clinically relevant problem in a specific area of anesthesia practice. Faculty input throughout the topic identification process will assist the doctoral student topic development towards a particular interest or aspect of practice that intrigues the student.

Synthesis topic ideas are endless. A general area of interest can be narrowed to a particular topic that can be systematically developed into a project. For example, a particular aspect of patient care may uncover a question of *why* do we practice this way, or *what* constitutes *best practice*? A topic may develop to validate and support a current practice or question a practice that has become standard. A synthesis topic can focus on assessing a certain standard of practice, a current practice methodology, an ongoing clinical concern, or an identified practice problem or need. Overall, clinically-based questions focus on prediction, intervention or exploration of a certain topic.

The topic is typically a version of the PICO(T) question developed during the Translational Research course and is refined with the assistance of the student's committee member(s).

STEP 2

Forming the Translational Research Question

PICOT Model⁸

Problem or Population—the recipients or potential beneficiaries of a service or intervention

Intervention—the service or planned action that being delivered to the population

Comparison—an alternative service or action that may or may not achieve similar outcomes

Outcome—the methods in which the service or action can be measured to establish whether or not it has had a desired effect

Timeframe-may be optional

A faculty-approved SPICE (setting, perspective, intervention, comparison, evaluation) or PICO(T) question is required before a synthesis focused project may proceed.

STEP 3

Registration of PICO(T) with JBI

The title and PICO(T) question should be registered with JBI. For instructions to register a PICO(T) question with JBI, contact Dru Riddle.

STEP 4

Protocol Development

The protocol for the systematic review should follow the prescribed JBI format using the JBI software. See the Reviewers Manual from JBI for the specific requirements for the JBI Protocol. Sufficient time should be allowed for peer review of the JBI Protocol and should be submitted to your committee members first before submission to JBI. This process can take 30-60 days.⁷

STEP 5

Literature Search

The exhaustive literature search is often the lengthiest part of the systematic review process. Two students will work together to accomplish this task. Consultation with the health sciences reference librarian is highly recommended.

STEP 6

Critical Appraisal

Critical appraisal of the literature is accomplished using the JBI software with two independent reviewers.

STEP 7

Data Extraction/Meta-Analysis

Extraction of data and possible meta-analysis follows critical appraisal of the literature. A meta-analysis is completed only if the data supports the statistical testing.

STEP 8**Final Review Composition**

The final step is to compose the final systematic review. This should be accomplished using the JBI software and submitted to your committee members before submission to JBI. Like the protocol, the peer review process can take 30-60 days so plan accordingly.

Advanced simulation reflective self-evaluation

All synthesis-focused students will write a reflective self-evaluation within 2 weeks after the advanced simulation experience in the human laboratory. The advanced simulation reflective self-evaluation is a required document for the DNP-A scholarly portfolio.

Summative reflective self-evaluation

All synthesis focused students will complete a summative reflective self-evaluation, minimum 6 pages, in clinical practicum IV. See p18, 19, and 21 for more information.

Section IV

Case Study Focused Project

In-depth examination of clinical case studies

The case study focused project interweaves phase I content (didactic courses) and phase II (clinical experience and courses). The case study focused project delves deeply into various aspects of clinical anesthesia integrating pharmacology, physiology, pathophysiology, and principles of translational research. Clinical anesthesia practice will be examined with current research to support evidence-based practice.

Domain 1: Professional/leadership

Case study focused students will regularly communicate with assigned faculty throughout the phase II clinical practicum period. Faculty will provide guidance in selecting appropriately challenging cases for in-depth study. Reflective self-evaluations are a critical component in professional and leadership development.

Domain 2: Clinical Milieu

The case study focused doctoral student will communicate regularly (at a minimum, the beginning and end of each semester) with their faculty advisors upon entering the clinical milieu foster growth and development in clinical practice.

Case Study Focused Clinical Project

The case study focused clinical project will demonstrate translation of research into practice and interdisciplinary collaboration to provide a basis for evaluation of patient care.⁹ Each case study consists of actual patient encounters that occur during the nurse anesthesia residency. A minimum of 2 complex case studies that provide sufficient evidence of clinical competence are required.

The student will seek complex cases commensurate with his/her level of education, training and experience for in-depth examination. Two cases throughout the clinical residency will be highlighted in the form of clinical case narratives. Case report 1 will be between 1200 and 1400 words. Case report 2 will be a minimum of 2000 words. After a case has been approved by the advisor the student may proceed with the clinical case narrative format as delineated below in AMA formatting:

The following SoA format will be used for all clinical case reports:

1. Abstract (200 words maximum)
2. Key words
3. Introduction
4. Case summary
 - a. Brief description of the patient (de-identified)
 - b. Patient history, review of symptoms, physical exam, pertinent diagnostic data

- c. Detailed perioperative course
- 5. Discussion
 - a. Current evidence/review of literature (no textbooks) as applicable to the situation
 - b. Recommendations for future practice
- 6. Reference list

Domain 3: Reflective Self-Evaluation Component

Exploring lessons learned and reflective contemplation is a key to professional development. This part of the portfolio is learner-driven. This qualitative case study focused portfolio domain is balanced by the more quantitative components located in the other domains.¹⁰ Reflection with self-evaluation will be accomplished by the following:

1. Exploring critical reflection/self-evaluation techniques (completed each semester). It is important to review the course objectives when describing what you have learned and how this learning will help you develop into a professional CRNA and DNP-A.
 - The advanced simulation reflective self-evaluation is due within 2 weeks of completing advanced simulation lab experience—clinical practicum II, III, or IV. The advanced simulation reflective self-evaluation is a required document for the DNP-A scholarly portfolio.
2. A summative reflective self-evaluation in the 9th semester (clinical practicum IV) will discuss how the student's case study focused clinical project represents the achievement of the program's goals and objectives, how the student has incorporated the eight AACN Essentials into their professional practice preparation, and how the unique knowledge and skills related to their DNP-A has prepared them for future practice.

Critical reflection/self-evaluation (clinical practicums I and II, minimum 4 pages; summative reflective self-evaluation, minimum 6 pages)

Students exposed to self-reflective activities can have a significant increase in the perception of their own learning abilities. As a result, the student takes on more responsibility for learning experiences and is more likely to engage in life-long learning.¹¹ Additionally, from this experience, students receive formative feedback from their portfolio committee.

Case study focused doctoral students will compose self-evaluations describing their current learning experiences in clinical practicums I and II. Any critical incident that occurs shall be submitted to the portfolio committee for evaluation as a clinical case narrative as well as incorporated in part of the self-reflection activities.

Some suggested critical reflection/self-evaluation guidance:

Overview of learning that has occurred in a course or clinical semester.

How do the portfolio works represent your professional development?

What challenges have you faced this semester?

What strengths have you developed?

What weaknesses have you identified?

How do you plan to address these strengths and weaknesses?

How has your learning prepared you toward practice as a CRNA, as a DNP-A?

How has this learning enabled you to progress toward the COA Competencies?

A summative reflective self-evaluation will be completed in clinical practicum IV. See p21 for further details.

Section V

The DNP-A Scholarly Portfolio

All nurse anesthesia residents will maintain a portfolio

What is a scholarly portfolio?

A portfolio represents a compilation of scholarly activities evidencing DNP-A competencies. Portfolios are an innovative, competency-based, qualitative and quantitative collection of scholarly processes that provide evidence of learning.¹

A portfolio is an ongoing form of assessment that incorporates both formative and summative evaluation. This makes a portfolio highly suitable for monitoring student development as well as assessing and mentoring learners' competency development. Portfolios represent the underpinnings for competency-based education and evaluation where the learner plays a pivotal role in the driving process.

This type of learning methodology and progression towards completion of doctoral study requires ongoing advisor/mentor-guided collaboration, assessment, and evaluation.¹¹ The assembly of all components for the DNP-A portfolio requires reflection, synthesis, and self-appraisal.¹⁰ This experience is transformational and provides the foundation for pursuit of enduring clinical scholarship. The portfolio also provides a measurable outcome of competency-based doctoral-level behaviors that can be evaluated by an academic committee.¹²

Characteristics of a DNP-A portfolio include, but are not limited to:

- Quantitative and qualitative written scholarly works
- Multiple competency-based assessments
- Equal detail and scholarship as other doctoral projects
- Structured reflection and analysis of learning and practice development
- Detailed clinical case reports

The portfolio project follows the *Collect, Select, Reflect, Connect* model by Johnson.¹⁰ The portfolio addresses 3 domains, reflecting both quantitative and qualitative competencies: (1) professionalism/leadership, (2) clinical knowledge/skills, and (3) critical reflection. The portfolio should disclose exceptional development in each of these areas.

Required documents for the portfolio

All students will maintain a compilation of scholarly works throughout the school of nurse anesthesia doctoral program. During the first semester, students will access and begin the process of maintaining a portfolio of course artifacts (documents, certificates, assignments, etc). TCU's portfolio (FrogFolio by Digication) is the host electronic platform. Details to access the portfolio (FrogFolio), example portfolios, and instructions

will be provided during the program. Strictly following the provided template is required. See p23-25 for details.

Note: this is NOT the portfolio within the TCU Online platform.

Advanced Simulation Critical Self Reflection

- Complete within 2 weeks after your advanced simulation.
- E mail completed copies to:
 - Primary advisor
 - Dr. Sadler
 - Dr. Nugent

Upload to ePortfolio using the title, “*Advanced Simulation Critical Self Reflection*”

Please address the following topics in your self-reflection paper:

What did you learn from participating in advanced simulation?
 What specific information you take back from simulation and use in your practice?
 What performance aspects did you do well?
 What performance aspects did you not do well?
 As an observer of other simulated scenarios what are some things you learned from observing your peers’ performance?
 What future potential scenarios might be useful to CRNA practice?

- The reflective self- evaluations will be no more than 1200 words and reflect pertinent essentials of doctoral education (identify specific Roman numeral within the self-evaluation—see bottom of page).

Students exposed to self-reflective activities can have a significant increase in the perception of their learning abilities. As a result, the student takes on more responsibility for learning and clinical practice evaluation.

A reflective self-evaluation after advanced simulation contributes to the student’s volume of work represented in their portfolio. It exemplifies the achievements of the program’s goals and objectives, and how the student has incorporated the essentials of doctoral education for advanced practice nursing, demonstrating how this unique simulated experience has prepared each student for future practice.

Essentials of doctoral education for advanced practice nursing:

- I. Scientific underpinnings for practice
- II. Organizational and systems leadership for quality improvement and systems thinking
- III. Clinical Scholarship and analytical models for evidence-based practice
- IV. Information systems/technology and patient care technology for the improvement and transformation of healthcare
- V. Health care policy for advocacy in health care
- VI. Interprofessional collaboration for improving patient and population health outcome
- VII. Clinical prevention and population health for improving the nation’s health
- VIII. Advanced nursing practice

(See pages 5-7 in the DNP Guide for more information.)

This document is also located in the DNP Guide.

Summative reflective self-evaluation. A summative reflective self-evaluation in the 9th semester (clinical practicum IV) will discuss the student's portfolio representation of program goals and objectives achievement, incorporation of the doctoral education essentials for advanced practice nursing¹ into their professional practice preparation, and how the unique knowledge and skills related to the DNP-A has prepared them for future practice. Summative reflective self-evaluations will be at least 6 pages. *All students (case study focus and synthesis focus) are required to write a summative reflective self-evaluation during clinical practicum IV.*

The summative reflective self-evaluation will address essentials of doctoral education for advanced practice nursing.¹

- I. Scientific underpinnings for practice
- II. Organizational and systems leadership for quality improvement and systems thinking
- III. Clinical Scholarship and analytical models for evidence-based practice
- IV. Information systems/technology and patient care technology for the improvement and transformation of healthcare
- V. Health care policy for advocacy in health care
- VI. Interprofessional collaboration for improving patient and population health outcomes
- VII. Clinical prevention and population health for improving the nation's health
- VIII. Advanced nursing practice

Additional Works: synthesis focused and case study focused projects

Individual projects provide evidence of scholarly work and of professional growth/contributions. Additional works allow self-direction and individual creativity. Explanation of how the additional work contributes to your professional development is required in each critical self-reflection.

Examples include but are not limited to: peer-reviewed publication, newspaper editorial, magazine article, peer-networking, professional membership, university or hospital committee membership, class spokesperson/president, international student exchange, mission trips, community activities, participation in research study, tutoring/student learning assistance, computer software/app/web site development, blogging, public relations, National Nurse Anesthetists Week activities, etc. The possibilities are endless and student creativity is encouraged.

Section VI

Timelines

THE DNP-A SCHOLARLY PORTFOLIO (ALL RRNAS)

Semester	Items for Submission	Deadline for Submission
1 spring, online 2 summer, online	<ul style="list-style-type: none"> • 2 Concept maps from EmergSci/Complexity • Science report (assign 3) from EmergSci/Complexity • Cost analysis (assign 2) from Decision Science • Decision/SWOT analysis (assign 3) from Decision Science • Research study critique from Research and Theory in NA • Critical appraisals from Research and Theory in NA <ul style="list-style-type: none"> ○ Qualitative study (assign 1) ○ Quantitative study (assign 2) • Current resume or CV of pre-doctoral program experience (upload on home page) 	<p>Spring courses: May 15 Summer courses: August 15</p> <p>Revise documents as recommended by course faculty. Upload to the portfolio (FrogFolio, Digication)</p>
3 fall, on campus	<ul style="list-style-type: none"> • Critical appraisal (assign 1) from Translational Research • Narrative review paper (assign 3) from Translational Research • Intervention, implement, evaluation discussion primary post from Translational Research (with title page, AMA format) • CITI certificate from Trans Res • AACN reflective self-evaluation from Trans Research 	<p>December 31</p> <p>Revise documents as recommended by course faculty. Upload to the portfolio</p>
4 spring, on campus	<ul style="list-style-type: none"> • Any course works of student's choice 	April 30
5 summer, on campus	<ul style="list-style-type: none"> • Any course works of student's choice 	July 31
6 fall, clinical practicum I	<ul style="list-style-type: none"> • Co-morbidity anesthetic plans: CAD, HTN; COPD; DM; ESRD; MH; obesity, OSA, and GERD • 3 clinical anesthesia care plans • Practicum I case log from Typhon • 1st clinical case report from clinical didactic I (see p17) • Submit completed NRB documents to faculty advisor (see p13) 	<p>Nov 30—upload required documents in the scholarly portfolio by due date</p> <p>Nov 30—submit NRB documents to faculty</p>
7 spring, clinical practicum II	<ul style="list-style-type: none"> • 3 clinical anesthesia care plans • Practicum II case log from Typhon 	April 1 —poster due for research symposium

	<ul style="list-style-type: none"> • Poster for doctoral presentation (see p26) • Advanced simulation reflective self-evaluation. Advanced Sim may be in practicum II, III, or IV (see p21). 	April 30 —upload required documents to scholarly portfolio by due date
8 summer, clinical practicum III	<ul style="list-style-type: none"> • 3 clinical anesthesia care plans • Practicum III case log from Typhon • AANA Wellness Modules certificates • Evidence of presenting the DNP-A poster to additional audiences. May be completed in practicum IV. See p27. 	July 31 —upload documents to scholarly portfolio by due date
9 fall, clinical practicum IV	<ul style="list-style-type: none"> • 3 clinical anesthesia care plans • Practicum IV case log from Typhon • Summative reflective self-evaluation (see p21, all students) • Summary of professional meeting attendance • Health policy course project • Final CV or resume 	November 30 —upload documents to scholarly portfolio by due date First Friday in Dec —final case log from Typhon

SYNTHESIS FOCUSED CLINICAL PROJECT

Semester	Items for Submission	Deadline for Submission
4 spring, on campus	<ul style="list-style-type: none"> Complete module 3 of JBI training class Draft protocol to faculty Initial search strategy discussed/outlined with reference librarian 	April 15
5 summer, on campus	<ul style="list-style-type: none"> Completed protocol to JBI Initial literature search completed 	August 1
6 fall, clinical practicum I	<ul style="list-style-type: none"> Any protocol revisions complete and protocol is approved/published by November 1 Complete literature search Studies for inclusion in SR are identified 	Nov 1 —protocol revisions Nov 30 —end of practicum I
7 spring, clinical practicum II	<ul style="list-style-type: none"> Assessment of methodological quality Data extraction Poster for research symposium Completed systematic review submitted to JBI 	Jan 15 —assessment method quality Feb 1 —data extraction Mar 1 —draft SR Mar 15 —draft of poster due April 1 —final version of poster due for printing April 30 —completed SR
8 summer, clinical practicum III	<ul style="list-style-type: none"> Revisions to systematic review completed by July 31 	July 31
9 fall, clinical practicum IV	<ul style="list-style-type: none"> Final systematic review published 	November 30

CASE STUDY FOCUSED CLINICAL PROJECT

6 fall, clinical practicum I	<ul style="list-style-type: none"> Reflective self-evaluation 	Nov 30
7 spring, clinical practicum II	<ul style="list-style-type: none"> 2nd clinical case report Reflective self-evaluation 	Feb 1 —2nd clinical case report topic due Mar 1 —draft of case report due Mar 15 —draft of poster due April 1 —final version of poster due for printing April 15 —final clinical case report due April 30 —reflective self-evaluation due
8 summer, clinical practicum III	<ul style="list-style-type: none"> Reflective self-evaluation 	July 31
9 fall, clinical practicum IV	<ul style="list-style-type: none"> Any additional works of student's choice 	Nov 30

Section VII

DNP-A Clinical Project

Clinical Project Presentation

The DNP-A Clinical Project poster will be presented at the School of Nurse Anesthesia Research Symposium held in late April or early May each year. All students (local and distant) will be present for the Research Symposium. A professional clinical project poster will be prepared and presented to the faculty and for peer review. Undertaking this project prepares the RRNA to incorporate clinical scholarship and analytical methods for evidence-based practice.¹

The poster will represent one of the following:

1. A clinical case study
2. The synthesis focused systematic review
3. The narrative review (from translational research or clinical topic)

General instructions:

1. Use the official TCU poster template size 42" x 56".
<http://www.cis.tcu.edu/default.asp?f=media-production&sf=graphics-production&p=research-posters>.
2. Visitors reading the poster should be able to scan and obtain all salient points within 5 minutes. Do NOT copy and paste information directly from a paper. The poster should be a condensed synopsis of the main aspects of a project.
3. The grading rubrics for the posters are in the DNP-A Project Guide. Review the rubric for the specific poster type (1) systematic review or narrative review developed from translational research or (2) clinical case study and ensure all points are addressed.
4. Follow AMA style to format the writing within the poster.¹³ Include *reference citations on all* images, graphs, diagrams, etc. Use high quality images.
5. Acceptable references are peer-reviewed journal articles, *quality* websites, and no more than one textbook.
6. Areas of focus or concentration include:
 - a. Why did one select this topic (PICOT) or case?
 - b. Provide a brief background of the issue or overview of the case
 - c. Briefly state the search strategy used to retrieve relevant literature
 - d. Discuss findings
 - i. Synthesis focused systematic review: findings of an analysis
 - ii. Case study: explain the pathophysiology and/or pharmacology of the clinical case and describe the course of action
 - e. Discuss conclusions, change in practice or recommendations for future research

Oral presentation of the poster:

1. The RRNA will present a poster including relevant findings, literature synthesis, and any recommendations for practice change to the faculty in a brief 3 minute oral presentation to a team of 2-3 faculty members.
2. The 3 minute oral presentation will be conducted using the 3-minute thesis (3MT, University of Queensland) style of presenting research.

General guidelines include:

- a. Write for the audience, explain concepts
 - b. Convey excitement and enthusiasm for the subject
 - c. Present the information as a story—how would you explain your work to a friend or family member who is unfamiliar with the topic area.
 - d. Target a specific point that is important for audience members to know from the presentation.
 - e. Practice, practice, practice.
 - f. Video record yourself giving the presentation.
 - g. Have someone watch you give the presentation and offer constructive criticism.
 - i. For more detailed information, view the Three Minute Thesis (3MT) website, University of Queensland, Australia.¹⁴
<https://threeminutethesis.uq.edu.au/>
 - ii. Direct links to resources for preparing a 3MT presentation: 3MT competitor guide, see drafting and presentation.
<https://threeminutethesis.uq.edu.au/resources/3mt-competitor-guide>
 - iii. In place of a single PowerPoint slide, RRNAs will present the DNP-A poster. Use the 3MT format to give the oral presentation to faculty.
 - iv. Faculty recommend watching several 3MT videos on the website to learn the format for presenting information within a 3-minute timeframe.
 - v. The faculty will elicit answers from the student during a 5-minute discussion after the oral presentation.
3. RRNAs will be evaluated on the ability to clearly articulate the poster topic, answering questions and project a confident, professional demeanor. See respective DNP-A poster rubrics on the following pages.
 4. Visit the SoA example portfolio and instructions (TCU FrogFolio, Digication) for additional assistance and resources for producing a quality poster. Click on clinical practicum doctoral coursework, research poster examples and directions.
 - Failure to successfully pass the poster DNP-A Project Presentation will result in remediation and a second doctoral project presentation.

Poster presentation to additional audience(s)

Disseminating findings from research projects to others in clinical practice can improve healthcare outcomes. To achieve this goal, all students are required to present their poster to educate others. This can be accomplished by presenting the poster at the AANA Nurse Anesthesia Annual Congress, a state meeting, at a clinical facility (in-service), the Harris College Research Symposium, clinical facility research events, etc. Coordinate the poster presentation event selection with your advisor.

Provide evidence of poster presentation to additional audiences to the DNP-A scholarly project. Evidence can be photos, email/letter of acceptance to present at a professional meeting and certificate of attendance, attestation from clinical faculty of presenting an inservice, etc.

**TCU School of Nurse Anesthesia DNP-A Program
POSTER PRESENTATION EVALUATION RUBRIC: CASE STUDY FOCUS**

Student name:

Score:

Advisor:

Evaluator:

	Point value	Points earned	Comments
Introduction/background 10 points			
• Clearly introduced subject/topic	3		
• Background appropriately informs reader	4		
• Background supports project work and motivation for project	3		
Case description/patient care 15 points			
• Appropriate history and physical	7		
• Clear, accurate description of perioperative course	8		
Discussion 20 points			
• Key points of case stated	6		
• Clinical rationale described	7		
• Case critique, alternatives stated	7		
Conclusion/recommendations for practice 20 points			
• Cites appropriate conclusions and any recommendations for similar scenarios	10		
• Recommendations possess clarity and based on supported clinical rationale	10		
Oral /affective component 25 points			
• Articulates clearly, concisely	3		
• Answers questions completely, without hesitation	3		
• Confident, professional demeanor	3		
• Presentation reflects adequate preparation	8		
• Conveys in-depth mastery and knowledge of the topic	8		
Poster style and layout 10 points			
• Easy to read, logical flow of information	2		
• Professional appearance	2		
• Effective use of graphics	2		
• Compliant with AMA format	2		
• No typographical errors	2		
Total	100		

Comments:

TCU School of Nurse Anesthesia DNP-A Program POSTER PRESENTATION EVALUATION RUBRIC

The following is a general description of the poster presentation ratings. Grades of A or B are passing for the DNP-A poster presentation. Grades of C or F will require remediation at the discretion of the student's DNP-A committee.

A, 92-100: Exemplary poster and oral presentation with little or no need for improvement. All areas of evaluation meet or exceed specified criteria. Few, if any, very minor flaws or gaps in the work. The final product is outstanding. The student is articulate and eloquent in delivery of the oral presentation, demonstrates in-depth mastery of the topic and a professional demeanor.

B, 83-91: Appropriate, acceptable work but with areas that require more detail or completeness. All areas of evaluation meet specified criteria. Minor flaws or gaps exist in the work but the overall final product is acceptable. The student is articulate in delivery of the oral presentation, demonstrates mastery of the topic and a professional demeanor.

C, 74-82: Clear, obvious deficits exist in the work. Flaws and gaps in the work are easy to identify. The final product would be acceptable with changes and/or additions to identified areas of evaluation. The student lacks ability to easily articulate delivery of the oral presentation. He/she demonstrates poor understanding of the topic and/or lacks professional demeanor. Areas requiring revision should be rectified by the student and resubmitted to the student's DNP-A committee.

F, 73 or less: Clear, identifiable, and obvious deficits exist in the work. Gross flaws and gaps in the work are easily identifiable in most, if not all, areas of evaluation. The final product is unacceptable. The student is unable to deliver an articulate presentation, lacks understanding of the topic and/or displays unprofessional demeanor. Areas requiring revision must be rectified by the student and resubmitted to the student's DNP-A committee.

**TCU School of Nurse Anesthesia DNP-A Program
POSTER PRESENTATION EVALUATION RUBRIC: SYNTHESIS FOCUSED
SYSTEMATIC REVIEW and NARRATIVE REVIEW**

Student name:

Score:

Advisor:

Evaluator:

	Point value	Points earned	Comments
Introduction/background 10 points			
• Clearly defined purpose/question/hypothesis (PICOT)	5		
• Background supports project work and motivation for project	5		
Literature review 15 points			
• Comprehensive, exhaustive literature search appropriate for project	5		
• Search methods transparent	5		
• Appropriate use of references	5		
Literature synthesis 20 points			
• Apparent/appropriate synthesis from literature review	7		
• Accurate, logical approach to synthesis	6		
• Synthesis congruent with current body of evidence	7		
Recommendations/directions for practice 20 points			
• Cites appropriate recommendations for future practice/research	10		
• Recommendations possess clarity and based on current research	10		
Oral /affective component 25 points			
• Articulates clearly, concisely	3		
• Answers questions completely, without hesitation	3		
• Confident, professional demeanor	3		
• Presentation reflects adequate preparation	8		
• Conveys in-depth mastery and knowledge of the topic	8		
Poster style and layout 10 points			
• Easy to read, logical flow of information	2		
• Professional appearance	2		
• Effective use of graphics	2		
• Compliant with AMA format	2		
• No typographical errors	2		
Total	100		

Comments:

TCU School of Nurse Anesthesia DNP-A Program POSTER PRESENTATION EVALUATION RUBRIC

The following is a general description of the poster presentation ratings. Grades of A or B are passing for the DNP-A poster presentation. Grades of C or F will require remediation at the discretion of the student's DNP-A committee.

A, 92-100: Exemplary poster and oral presentation with little or no need for improvement. All areas of evaluation meet or exceed specified criteria. Few, if any, very minor flaws or gaps in the work. The final product is outstanding. The student is articulate and eloquent in delivery of the oral presentation, demonstrates in-depth mastery of the topic and a professional demeanor.

B, 83-91: Appropriate, acceptable work but with areas that require more detail or completeness. All areas of evaluation meet specified criteria. Minor flaws or gaps exist in the work but the overall final product is acceptable. The student is articulate in delivery of the oral presentation, demonstrates mastery of the topic and a professional demeanor.

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F, 73 or less: Clear, identifiable, and obvious deficits exist in the work. Gross flaws and gaps in the work are easily identifiable in most, if not all, areas of evaluation. The final product is unacceptable. The student is unable to deliver an articulate presentation, lacks understanding of the topic and/or displays unprofessional demeanor. Areas requiring revision must be rectified by the student and resubmitted to the student's DNP-A committee.

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