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Section I
DNP Capstone Project

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DNP Capstone Project Philosophy and Purpose

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

<table>
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<tr>
<th>AACN Final DNP Project</th>
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| "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."\textsuperscript{1(p20)} 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.\textsuperscript{1(p20)}

"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."\textsuperscript{1(p20)}
Essentials of Doctoral Education for Advanced Nursing Practice provide the framework for assessment of outcome competencies.\(^{1(p8-17)}\)

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.

G. Use conceptual and analytical skills in evaluating the links among practice, organizational, population, fiscal, and policy issues.
DNP Capstone Project Overview

The DNP Capstone 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 capstone projects. Evidence-based practice is a process that includes locating, appraising, and applying quality scientific evidence. Evidence-based practice is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The DNP project can seek to gain new knowledge from primary research, translate existing research findings or focus on implement 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.

There are two main types of DNP Capstone Projects:

1. **Synthesis project**: Joanna Briggs Institute Systematic Review (www.joannabriggs.org)

2. **Electronic-Portfolio project** following the School of Nurse Anesthesia format consisting of a compilation of scholarship and learning activities

**DNP Capstone Project Objectives:**

The DNP Capstone Project is a scholarly process that will assist the DNP student to:

- Appraise evidence to implement 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
- Utilize 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 students will compile documents and artifacts from coursework throughout the program into an electronic portfolio. Items for inclusion in the electronic portfolio will differ between students selecting the synthesis project and students selecting the electronic portfolio project. See pp 14-23 for more details.
SNA DNP Project Faculty

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

Ron Anderson, MD
Assistant 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), current
Project interests include: informatics, evidence-based practice, quality improvement, research.
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, Associate 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  
Assistant Professor of Professional Practice  
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.

Hylda Nugent, DNP, CRNA  
Associate Professor of Professional Practice  

J. Dru Riddle, PhD, DNP, CRNA  
Assistant 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; MSNA (Texas Christian University), 1984; 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  
*Associate Professor 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 Capstone Project Coordinator and Program Director. A primary and secondary advisor forms each DNP Committee. 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-teleconference (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. See Section VI, DNP Capstone Project, Doctoral Presentation.
- Provide guidance and feedback for progression of Capstone Projects: e-Portfolio or JBI Systematic Review.
All DNP projects require approval from the HCNHS NRB before the student can proceed with each project. NRB approval is required for all DNP Capstone 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 College of Nursing and Health Sciences Research Web site, student research tab, 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://harrisresearch.tcu.edu/student-research/student-irb-forms/student-protocol-review/. Located on the Harris College Research Web site, student research, student IRB forms, and student protocol review.

Nursing forms:

Synthesis Project Basics

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

What is a synthesis 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. Synthesis projects put information together to gain greater understanding and direction pertaining to a particular subject.

A SNA DNP Capstone synthesis 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 SNA Synthesis Project is the Joanna Briggs Institute Systematic Review.

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

<table>
<thead>
<tr>
<th>PICOT Model&lt;sup&gt;8&lt;/sup&gt;</th>
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<tr>
<td><strong>Problem or Population</strong>—the recipients or potential beneficiaries of a service or intervention</td>
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<tr>
<td><strong>Intervention</strong>—the service or planned action that being delivered to the population</td>
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<tr>
<td><strong>Comparison</strong>—an alternative service or action that may or may not achieve similar outcomes</td>
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<tr>
<td><strong>Outcome</strong>—the methods in which the service or action can be measured to establish whether or not it has had a desired effect</td>
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<tr>
<td><strong>Timeframe</strong>—may be optional</td>
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A faculty-approved SPICE (setting, perspective, intervention, comparison, evaluation) or PICO(T) question is required before a capstone 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.<sup>7</sup>

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.
Section IV
DNP Capstone Project
Portfolio Project

Portfolio Project Basics

What is a portfolio project?
A portfolio represents a compilation of scholarly activities evidencing DNP competencies. AACN Essentials lists portfolios as an appropriate DNP project. Portfolio projects 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.9 The assembly of all components for the DNP 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.11

Characteristics of a DNP Portfolio project 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 project addresses three domains, reflecting both quantitative and qualitative competencies: (1) professionalism/leadership, (2) clinical knowledge/skills, and (3) critical reflection. The portfolio project should disclose exceptional development in each of these areas.
Each student who is approved to begin a portfolio project will be assigned a SNA faculty primary advisor. Other University doctoral-prepared faculty or nurse leaders may participate on the student’s portfolio committee. This committee is the guiding team that advises and mentors the student with their portfolio project development. Students may request particular faculty and non-faculty members to serve as members of their committee at the discretion of the DNP Project Coordinator.

**Domain 1: Professional/Leadership**
The doctoral student will meet with their newly assigned faculty early in the 4th semester (second spring semester, on campus) to begin development of their portfolio project. Development, collection, and documentation of ongoing scholarly work will begin starting with the 3rd semester (first fall, on-campus semester) and every semester thereafter. Appropriate evidence of scholarly works (didactic course work and additional works) and learning will be compiled in digital format for the portfolio. (See timelines)

**Domain 2: Clinical Milieu**
The doctoral student will communicate regularly (at a minimum, the beginning and end of each semester) with their portfolio faculty advisors upon entering the clinical milieu to develop the clinical component documentation of their portfolio project. The clinical components consist of the following:

1. Develop detailed clinical case reports (1 each clinical semester) 3 total
2. Develop anesthesia care plans (50 total)
3. Demonstrate clinical case log completion

**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 portfolio domain is balanced by the more quantitative components located in the other domains. 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 develop you into a professional CRNA and DNP.
2. A summative reflective self-evaluation in the 9th semester (3rd fall semester) will explain how the student’s portfolio 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 has prepared them for future practice.
Portfolio Project Specifics

Portfolio Required Documents
Many required documents were completed early in the program’s coursework. Existing scholarly course work may be modified or developed as part of your portfolio. Some required documents are topic specific only and student intellectual creativity is allowed within this topic area. Other documents may require specific guidelines as described below. TCU’s FrogFolio by Digication is the electronic platform hosting the portfolio. Details to access FrogFolio, example portfolios, and instructions will be provided during the program. Strictly following the provided template is required.

Clinical Case Reports
The case narrative format was developed as part of the portfolio project to demonstrate translation of research into practice and interdisciplinary collaboration to provide a basis for evaluation of patient care. Each narrative consists of actual patient encounters that occur during the nurse anesthesia residency. A minimum of 3 complex case narratives that provide sufficient evidence of clinical competence are required.

The student will seek out complex cases commensurate with his/her level of education, training and experience for presentation to the portfolio committee. Three cases throughout the clinical residency will be highlighted in the form of clinical case narratives. The first clinical case report will be between 1200 and 1400 words. Case reports 2 and 3 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 SNA format will be applied to the clinical case reports:
1. Abstract (200 words maximum)
2. Keywords
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

Critical reflection/self-evaluation (every clinical semester, 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. Additionally from this experience students receive formative feedback from their portfolio committee. Each semester doctoral students will compose self-evaluations describing their current learning experiences. 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.

<table>
<thead>
<tr>
<th>Some suggested critical reflection/self-evaluation guidance:</th>
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<tbody>
<tr>
<td>Overview of learning that has occurred in a course or clinical semester.</td>
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<tr>
<td>How do the portfolio works represent your professional development?</td>
</tr>
<tr>
<td>What challenges have you faced this semester?</td>
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<tr>
<td>What strengths have you developed?</td>
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<tr>
<td>What weaknesses have you identified?</td>
</tr>
<tr>
<td>How do you plan to address these strengths and weaknesses?</td>
</tr>
<tr>
<td>How has your learning prepared you toward practice as a CRNA, as a DNP?</td>
</tr>
<tr>
<td>How has this learning enabled you to progress toward the COA Competencies?</td>
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</table>

A summative reflective self-evaluation in the 3rd fall semester (semester 9) will explain how the student’s portfolio represents the achievement of the program’s goals and objectives, how the student has incorporated the essentials of doctoral education for advanced practice nursing into their professional practice preparation, and how the unique knowledge and skills related to the DNP has prepared them for future practice. Summative reflective self-evaluations will be at least 6 pages. All students (Portfolio and JBI review) are required to write a summative reflective self-evaluation during the 3rd fall semester.

The summative reflective self-evaluation will address 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 outcomes
VII. Clinical prevention and population health for improving the nation’s health
VIII. Advanced nursing practice

See pages 5-7

Additional Works
As portfolio projects reflect the individual development of the student additional works (evidence) of scholarly work, professional growth/contributions are required. Additional works allow self-direction and individual creativity. Explanation of how the additional work contributes to your professional development is required in each semester’s critical 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 V
DNP Capstone Project
Timelines
<table>
<thead>
<tr>
<th>Semester</th>
<th>Items for Submission</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td>1 (Spring) and 2 (Summer)</td>
<td>Online coursework</td>
<td>N/A</td>
</tr>
</tbody>
</table>
| 3 (Fall: first on-campus semester) | 2 concept maps from EmergSci/Complexity  
  Cost analysis (assign 2) from Decision Science  
  Decision/SWOT analysis (assign 3) from Decision Science | November 15  
  Revise documents as recommended by course faculty. Upload to ePortfolio |
| 4 (Spring)                    | Critical appraisal (assign 1) from Trans Research  
  Narrative review paper (assign 3) from Translational Research  
  Intervention, implement, evaluation EBD 8.1 from Trans Research (title page, AMA format) | April 15  
  Revise documents as recommended by course faculty. Upload to ePortfolio |
| 5 (Summer)                    | Research article critiques (assign 3) from Research and Theory in Nurse Anesthesia  
  Science report (assign 3) from Emerging Science, Innovation, and Complexity | August 1  
  Revise documents as recommended by course faculty. Upload to ePortfolio |
| 6 (Fall: first clinical semester)  
  Typhon access granted prior to beginning clinical practicums | 1st clinical case report from Clinical Didactic I  
  15 anesthesia care plans from clinical  
  Practicum I case log from Typhon  
  Reflective self-evaluation | November 30  
  *Faculty advisors will review previously uploaded documents to ePortfolio. |
| 7 (Spring)                    | Poster for presentation at symposium  
  2nd clinical case report  
  15 anesthesia care plans from clinical  
  Practicum II case log from Typhon  
  Reflective self-evaluation | April 1—poster due  
  April 15—2nd clinical case report due  
  April 30—care plans, case log, self-reflection due |
| 8 (Summer)                    | 3rd clinical case report  
  Health policy analysis from Health Policy  
  Summary of professional meeting attendance  
  10 anesthesia care plans from clinical  
  Practicum III case log from Typhon  
  Reflective self-evaluation | July 31 |
| 9 (Fall)                      | Finalized CV or resume  
  10 anesthesia care plans from clinical  
  Practicum IV case log from Typhon  
  Summative reflective self-evaluation  
  Wellness module certificates  
  Any additional works of student’s choice | November 30  
  First Friday in Dec—final case log from Typhon |
<table>
<thead>
<tr>
<th>Semester</th>
<th>Items for Submission</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Spring) and 2 (summer)</td>
<td>Online coursework</td>
<td>N/A</td>
</tr>
<tr>
<td>3 (Fall: first on-campus semester)</td>
<td>• PICO Question registered with faculty/JBI</td>
<td>December 15</td>
</tr>
<tr>
<td>4 (Spring)</td>
<td>• Complete Module 3 of JBI Training class&lt;br&gt;• Draft Protocol to faculty&lt;br&gt;• Initial search strategy discussed/outlined with Reference Librarian</td>
<td>April 15</td>
</tr>
<tr>
<td>5 (Summer)</td>
<td>• Completed Protocol to JBI&lt;br&gt;• Initial literature search completed&lt;br&gt;• 2 concept maps from EmergSci/Complexity&lt;br&gt;• Cost analysis (assign 2) from Decision Science&lt;br&gt;• Decision/SWOT analysis (assign 3) from Decision Science&lt;br&gt;• Critical appraisal (assign 1) from Trans Research&lt;br&gt;• Narrative review paper (assign 3) from Translational Research&lt;br&gt;• Intervention, implement, evaluation TD 8.1 from Trans Research (with title page, AMA format)&lt;br&gt;• Research article critiques (assign 3) from Research and Theory in Nurse Anesthesia&lt;br&gt;• Science report (assign 3) from Emerg Sci, Innov, and Complex</td>
<td>August 1&lt;br&gt;Revise documents as recommended by course faculty, upload to ePortfolio</td>
</tr>
<tr>
<td>6 (Fall: first clinical semester)</td>
<td>• Any protocol revisions complete and protocol is approved/published by November 1&lt;br&gt;• Complete literature search&lt;br&gt;• Studies for inclusion in SR are identified&lt;br&gt;• Case log and care plans&lt;br&gt;• Clinical case report from Clinical Didactic 1</td>
<td>November 30&lt;br&gt;*Faculty advisors will review previously uploaded documents to ePortfolio.&lt;br&gt;*Upload care plans, case reports, and reflective self-evaluations each practicum</td>
</tr>
<tr>
<td>7 (Spring)</td>
<td>• Assessment of methodological quality completed by Jan 15&lt;br&gt;• Data extraction by March 1&lt;br&gt;• Poster presentation due April 1&lt;br&gt;• Completed systematic review submitted to JBI by April 30</td>
<td>April 1—poster due&lt;br&gt;April 1—draft SR due to faculty&lt;br&gt;April 30—care plans and care log due</td>
</tr>
<tr>
<td>8 (Summer)</td>
<td>• Revisions to systematic review completed by July 31&lt;br&gt;• Case log and care plans</td>
<td>July 31</td>
</tr>
<tr>
<td>9 (Fall)</td>
<td>• Final systematic review published&lt;br&gt;• Summative reflective self-evaluation (see p 20 of this guide for specific directions),&lt;br&gt;• Finalized CV or resume&lt;br&gt;• Care plans&lt;br&gt;• Case log due first Friday in Dec</td>
<td>November 30&lt;br&gt;First Friday in Dec—final case log from Typhon</td>
</tr>
</tbody>
</table>
The DNP 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 doctoral 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 report
2. The 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”.
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 Project Guide (see p 26-29). Review the rubric for the specific poster type (1. systematic review or narrative review developed from translational research or 2. clinical case report) 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. Systematic review: findings of an analysis
      ii. Case report: 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 3-5 minute oral presentation to a team of 2-3 faculty members.
2. The faculty will elicit questions 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 poster rubrics on the following pages.

Visit the SNA example portfolio and instructions 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 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.
**TCU School of Nurse Anesthesia DNP Program**  
**POSTER PRESENTATION EVALUATION RUBRIC: CASE REPORT**

<table>
<thead>
<tr>
<th>Student name:</th>
<th>Score:</th>
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<thead>
<tr>
<th>Section</th>
<th>Points</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction/background</strong> 10 points</td>
<td></td>
<td></td>
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<tr>
<td>• Clearly introduced subject/topic</td>
<td>3</td>
<td></td>
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<tr>
<td>• Background appropriately informs reader</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>• Background supports project work and motivation for project</td>
<td>3</td>
<td></td>
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| 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 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 Program
### POSTER PRESENTATION EVALUATION RUBRIC: SYSTEMATIC REVIEW and NARRATIVE REVIEW

<table>
<thead>
<tr>
<th>Student name:</th>
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<thead>
<tr>
<th><strong>Introduction/background points</strong></th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>• Clearly defined purpose/question/hypothesis (PICOT)</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>• Background supports project work and motivation for project</strong></td>
<td>5</td>
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<tr>
<th><strong>Literature review points</strong></th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>• Comprehensive, exhaustive literature search appropriate for project</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>• Search methods transparent</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>• Appropriate use of references</strong></td>
<td>5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Literature synthesis points</strong></th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>• Apparent/appropriate synthesis from literature review</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>• Accurate, logical approach to synthesis</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>• Synthesis congruent with current body of evidence</strong></td>
<td>7</td>
</tr>
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<table>
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<tr>
<th><strong>Recommendations/directions for practice points</strong></th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>• Cites appropriate recommendations for future practice/research</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>• Recommendations possess clarity and based on current research</strong></td>
<td>10</td>
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<tr>
<th><strong>Oral /affective component points</strong></th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>• Articulates clearly, concisely</strong></td>
<td>3</td>
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<td><strong>• Answers questions completely, without hesitation</strong></td>
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<tr>
<td><strong>• Presentation reflects adequate preparation</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>• Conveys in-depth mastery and knowledge of the topic</strong></td>
<td>8</td>
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<tr>
<th><strong>Poster style and layout points</strong></th>
<th>10</th>
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<tbody>
<tr>
<td><strong>• Easy to read, logical flow of information</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>• Professional appearance</strong></td>
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References


