

Missouri State University  
Curricular Proposal - New Program  
(MAJOR, OPTION, MINOR, CERTIFICATE, OR CERTIFICATION)

SEP 18 2013

This form is to be used for internal Missouri State approval of any proposal for a new program involving two or more courses, including any new graduate program, new undergraduate major (whether comprehensive or non-comprehensive), new option within an existing program (whether graduate or undergraduate), new minor, new certificate, or new certification program.

New graduate programs, new undergraduate majors, and certificate programs involving more than 18 credit hours require approval by the CBHE as well as approval through the Missouri State curricular process. CBHE applications for such programs are processed through the Office of Institutional Research. All proposals for new programs requiring CBHE approval should progress through the Missouri State curricular process accompanied by a draft of the required CBHE documentation.

Department Biomedical Sciences Date July 18, 2013

Attach on separate sheets (1) statement of rationale and objectives, (2) estimated costs for first five years, and (3) complete catalog description (including new courses and course changes pending approval). [Note: For new programs requiring CBHE approval, CBHE forms NP, PS, and PG will satisfy #1 and CBHE form FP will satisfy #2.]

PROPOSED PROGRAM Doctor of Nurse Anesthesia Practice (DNAP)

Major  Comprehensive Major  Option  Minor  Certificate  Certification  Academic Rules  Other

Degree Applicability Advanced Practice Nursing degree/Nurse Anesthetist Education/Accredited Program

General Education Courses Required N/A Total Hours: N/A

General Education Courses Recommended N/A Total Hours N/A

Requirements (including Admission) and Limitations for Specific Degree Bachelor of Science Degree

Courses Required in Department BMS728, BMS620, BMS 742, BMS 742, BMS 700, ANE 745, ANE 746, ANE 720, ANE 726, ANE 735, ANE 714, ANE 897, ANE 898, AME 732, ANE 750, ANE 702, ANE 705, ANE 708, ANE 711, ANE 750, ANE 803, ANE 806, ANE 807, ANE 810

Total Hours 101

Courses Required in Other Departments NUR 800, NUR 734, PHI 613, ECO 604, PBH 730

Total Hours 17

Prerequisites for Required Courses Admission into the Anesthesia Program

Recommended Electives in Department: None

Total Hours 0

Recommended Electives in Other Departments None

Total Hours 0

Limitations on Electives: N/A

DEPARTMENT Route according to ART VI, SEC 3B(1-4) of Bylaws of the Faculty Senate. Attach New Program Resource Information form (FS-302a/06) and forward three typed, originally signed forms to one of the following (please mark all that apply). If the program needs to go through more than one committee/council, forward one additional form for each additional council/committee marked.

College Council (Send all new undergraduate programs through College Council as first step before forwarding either to PEC, CGEIP, or directly to Faculty Senate)

Professional Education Committee (All proposals affecting BS and MS in Education and Educational Specialist degrees)

Committee on General Education and Intercollegiate Programs (All general education and multi-college programs)

Graduate Council (All graduate programs)

Signature Collette W. Westwood  
Department Head

Date 8/20/13

ROUTING

1. COLLEGE COUNCIL (ART VI, SEC 2B)

APPROVED

After each review/comment, forward two signed copies of final action to the Secretary of the Faculty for disposition, or forward appropriate number of copies to next committee level for approval.

DISAPPROVED

Return one signed copy of final action to the appropriate Department Head.

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

Chairperson

Date \_\_\_\_\_

2. DEAN OF THE COLLEGE (ART VI, SEC 5)

REVIEWED

Return to College Council Chair within ten days of receipt for disposition.

Comment(s) \_\_\_\_\_

Signature Alan Cecil

Dean of the College

Date 8/20/13

3. PROFESSIONAL EDUCATION COMMITTEE (ART III, SEC 9)

APPROVED

Forward two signed copies of final action to the Secretary of the Faculty for disposition, or forward three signed copies to next committee level for approval.

DISAPPROVED

Return one signed copy of final action to the appropriate Department Head.

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

Chairperson

Date \_\_\_\_\_

4. COMMITTEE ON GENERAL EDUCATION AND INTERCOLLEGIATE PROGRAMS (ART IV, SEC 2)

APPROVED

Forward two signed copies of final action to the Secretary of the Faculty for disposition, or forward three signed copies to next committee level for approval.

DISAPPROVED

Return one signed copy of final action to the appropriate Department Head.

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

Chairperson

Date \_\_\_\_\_

5. GRADUATE COUNCIL (ART V, SEC 3, OR ART VI, SEC 3B)

APPROVED

Forward two signed copies of final action to the Secretary of the Faculty for disposition.

DISAPPROVED

Return one signed copy of final action to the appropriate Department Head.

Comment(s) \_\_\_\_\_

Signature Ble C...

Chairperson

Date 9/11/13

6. FACULTY SENATE (ART VI, SEC 9)

APPROVED

DISAPPROVED

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

Chairperson

Date \_\_\_\_\_

7. PROVOST (ART I, SEC 6; ART VI, SEC 9)

RECOMMENDED TO PRESIDENT

NOT RECOMMENDED TO PRESIDENT

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

Provost

Date \_\_\_\_\_

8. PRESIDENT

APPROVED

DISAPPROVED

Comment(s) \_\_\_\_\_

Signature \_\_\_\_\_

President

Date \_\_\_\_\_

**NEW PROGRAM RESOURCE INFORMATION**

Program Title and Degree: Doctor of Nurse Anesthesia Practice

Department: Biomedical Sciences

Attach on separate sheets (1) statement of rationale and objectives, (2) estimated costs for first five years, and (3) complete catalog description (including new courses and course changes pending approval).

[Note: For new programs requiring CBHE approval, CBHE forms NP, PS, and PG will satisfy #1 and CBHE form FP will satisfy #2.]

1. Is another program being deleted or altered?  X  Yes   No
2. If this program affects other departments or colleges, has a memo showing how it will affect them been attached to the proposal?  X  Yes   No
3. What justification is being provided to support this proposal? (Current research, accreditation, certification or licensing requirements, other.) Accreditation requirements of the Council of Accreditation (COA) for Nurse Anesthesia has recommended that all MSNA programs transition to a clinical Doctorate by 2025.
4. If your response to #3 refers to existing or potential student demand, please indicate the activities undertaken to estimate or verify the potential or existing demand for this new program.
5. What are the present/future projected enrollments for this program?

1<sup>st</sup> year  14  3<sup>rd</sup> year  14

In five years, how many students must be:

- a) declared minors to justify this new minors continuation
- b) declared majors to justify this new majors continuation  14

6. Which of the following would be needed to implement the proposed program? (Check all that apply.) Individuals responsible for specific areas outside of your college must be consulted.

Additional library holdings?	<u> </u> Yes	<u> X </u> No
Additional technology or other supplies?	<u> </u> Yes	<u> X </u> No
Additional or remodeled facilities?	<u> </u> Yes	<u> X </u> No
Additional travel funds?	<u> </u> Yes	<u> X </u> No
Additional faculty?	<u> X </u> Yes	<u> </u> No
Additional support staff?	<u> X </u> Yes	<u> </u> No
Other additional expenses?	<u> </u> Yes	<u> </u> No

7. Have the individuals responsible for allocation of these resources been contacted to ensure the availability of these resources by the time the program is implemented?

X  Yes   No   Yes, but cannot ensure availability

# Department of Biomedical Sciences

Professional Building, Room 400,  
Phone: (417) 836-5603, Fax: (417) 836-5603  
Email: [BiomedicalSciences@missouristate.edu](mailto:BiomedicalSciences@missouristate.edu)  
Website: <http://www.missouristate.edu/bms/>  
Department Head: Colette M. Witkowski

## Doctorate of Nurse Anesthesia Practice

Monika Feeney, DNAP, CRNA, Program Director Nurse Anesthesia Program  
MSU School of Nurse Anesthesia;  
Phone (417)-836-4537 or [MonikaFeeney@missouristate.edu](mailto:MonikaFeeney@missouristate.edu)

### Program Description

The Missouri State University School of Anesthesia provides the scientific foundation and clinical training that prepares anesthesia providers as certified registered nurse anesthetists (CRNA) at the clinical doctorate level.

### Program Accreditation

The Missouri State University School of Nurse Anesthesia is fully accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, the official accrediting agency for nurse anesthetists. They may be contacted at 222 South Prospect Avenue, Park Ridge IL 60068; Ph: 847-692-7050

### Entrance Requirements

All applicants must meet the following requirements:

1. A bachelor's degree in an area of life sciences, nursing, or chemistry from an accredited institution in the U.S. or equivalent training in a foreign university
2. Undergraduate work must include inorganic chemistry (4 hrs), organic chemistry (4 hrs), microbiology, human anatomy, human physiology; and genetics (strongly recommended)
3. A minimum GPA of 3.00 on a 4.00 scale for the last 60 hours of undergraduate course work. Emphasis will be placed on science courses.
4. Submission of official Graduate Record Examination (GRE) scores taken no earlier than five years prior to application with a preferred minimum score of 153 in Verbal Reasoning, 150 in Quantitative Reasoning, and 3.5 in Analytical Writing, or successful passing of the CCRN (preferred).
5. Current licensure as a registered nurse in the U.S.
6. A minimum of one year experience in an acute care setting is required; preferences may be given to applicants with more experience. Contact the clinical program director regarding questions about appropriate nursing experience
7. **Current** BLS, ACLS, PALS certification are required
8. A personal interview with a screening committee

9. The application deadline for June classes to be interviewed is mid-January.
10. Students are required to complete a criminal background check and a drug screen prior to beginning classes..
11. Upon acceptance to the program, the student will pay \$200.00 the AANA for an associate membership (American Associate of Nurse Anesthetists)
12. A \$500.00 confirmation deposit is required to hold a seat in the class once a student accepted a cohort position. The fee is required to be paid to Missouri State University and is used as part of the first semester's tuition

### Degree Requirements

- A. Students that have already completed their CRNA certification at the Masters Level, can be admitted into the completion program, requiring 26 graduate hours for completion. These hours may be completed via distance and may be completed on a part time or full time basis.
- B. **Course Requirements Total 118 hrs**

#### ANE courses 88 hours

Course Code	Course Title ANE Classes	Credit Hours
ANE 702	Clinical Conference I	1 hr
ANE 705	Clinical Conference II	1 hr
ANE 708	Clinical Conference III	1 hr
ANE 711	Clinical Conference IV	1 hr
ANE 714	Orientation to Clinical Anesthesia	1 hr
ANE 720	Basic Principles of Anesthesia	3 hrs
ANE 726	Introduction to Clinical Anesthesia	2 hrs
ANE 732	Advanced Anesthesia Principles I	6 hrs
ANE 735	Clinical Practicum	44 hrs
ANE 745	Anesthesia Pharmacology I	4 hrs
ANE 746	Anesthesia Pharmacology II	3 hrs
ANE 750	Advanced Anesthesia Principles II	4 hrs
ANE 897	Research for Scholarly Project	3 hrs
ANE 898	Capstone project presentation	3 hrs
ANE 803	Human Factors and Patient Safety in Healthcare	3 hrs
ANE 806	Professional Practice in Anesthesia	3 hrs
ANE 807	Anesthesia and Healthcare Policy	3 hrs
ANE 810	Health and Wellness	2 hrs

Non-ANE courses 30

Course Code	Course Title Non ANE Classes	Credit Hours
BMS 700	Introduction to Graduate Studies in the Biomedical Sciences	3 hrs
BMS 620	Medical Cell Biology	3 hrs
BMS 728	Human Neurophysiology and Anatomy	3 hrs
BMS 742	Human Physiology II	4 hrs
NUR 800	Leadership, Evidence Based Practice	3 hrs
NUR 734	Advanced Physical Assessment	5 hrs
PHI 613	Bioethics	3 hrs
ECO 604	Healthcare Economics	3 hrs
PBH 730	Biostatistics in Health Sciences	3 hrs

1. **Research/ Capstone Requirement (total 6 hours).** Each student will complete a Capstone project. The project must be started in the ANE 897 class and completed in the ANE 898 class, Students are allowed to work in groups of 2 or maximum 3 if approved by the Program Director.
2. **Students who are already Masters prepared CRNA's:** A certified registered nurse anesthetist (CRNA) may enter the program and must complete the following 26 credit hours. Course work may be done on a full time or part time basis.
3. **Additional requirements or limitations.**
  - A. The candidate must maintain a minimum GPA of at least 3.00 each semester for the degree
  - B. All requirements must be satisfied within eight years
  - C. Students may take up to 6 hours of non ANE classes prior to acceptance into the program.
  - D. All course work must be approved by the Program Director
  - E. The candidate must pass oral and written comprehensive examinations
  - F. No more than 4 hours of C grade is allowed during the program
  - G. No grade below a C grade will be allowed at any time during the program
  - H. Candidates who do not achieve the academic standards set forth by the program will be immediately dismissed

- I. During the clinical phase, years 2 and 3, the student will carry liability insurance purchased through the AANA
- J. A \$2500.00 program fee will be applied per each semester: Fall, Spring and Summer

Course listing:

## **DNAP Courses**

### **BMS 620      Medical Cell Biology**

Prerequisite: admission to the MS in Nurse Anesthesia program. Focus on the molecular aspects of cell biology for students in the Nurse Anesthesia program. Content identical to the lecture part of BMS 622. Cannot receive credit for both BMS 620 and 622. May be taught concurrently with BMS 520. Cannot receive credit for BMS 520 and BMS 620. 3(3-0) F, S

### **BMS 728      Human Anatomy and Neurophysiology**

Prerequisite: permission of instructor. The study of human anatomy and human nervous system including anatomy and principles of function of the Central and Peripheral Nervous systems with emphasis on acute and chronic pain syndromes. Extensive exploration of the anatomy and treatment of acute and chronic pain, including the use of upper and lower extremity regional blocks, subarachnoid and epidural techniques, and other procedures around the spine, with image guidance for acute and chronic pain management. . Supplemental course fee for anatomy lab.3(3-0) Su, F.

### **NUR 800      Leadership I: Concepts for Evidence Based Practice**

Prerequisite: admission to the DNAP program. This course explores foundational concepts for the development of the DNAP nurse leader and Anesthesia Capstone Project. Concepts include transforming healthcare through evidence-based practice, quality improvement, and leadership in healthcare systems, project planning, evaluation of evidence, and consideration of disparities in health and healthcare from a population focus. 3(2-3), Su

#### **Fall**

### **PHI 613 Bio Ethics**

An introduction to central ethical questions that arise in the area of bioethics, and to the resources various ethical theories offer for resolving those questions. In addition to a brief overview of contemporary moral theory, the course will discuss issues such as euthanasia, informed consent, proxy decision-making, experimental research on humans and health care allocation. Specific cases will be discussed and analyzed throughout the semester. May be taught concurrently with PHI 513. Cannot receive credit for both PHI 513 and PHI 613. 3(3-0) D

### **NUR 734      Advanced Physical Assessment and Clinical Reasoning**

Prerequisite: admission to the Family Nurse Practitioner specialization. Advanced critical thinking, communication and diagnostic skills needed to obtain comprehensive and focused history and physical exams, analyze assessment data, generate differential diagnoses, evaluate and utilize screening and diagnostic modalities appropriately. An evidence-based practice framework will be utilized. Supplemental course fee. 5(3-6) F

### **ECO 604      Healthcare Economics**

Recommended Prerequisite: ECO 165. A basic study of the economics of the health care market. Microeconomic theory is applied to the analysis of health care issues. Attention will be given to empirical studies of health care

economics. Identical with HCM 604. Cannot receive credit for both ECO 604 and HCM 604. May be taught concurrently with ECO 504. Cannot receive credit for both ECO 504 and ECO 604. 3(3-0) F

**ANE 745            Anesthesia Pharmacology I**

Prerequisite: permission of instructor. Study of the principles of clinical pharmacology and the pharmacokinetics and pharmacodynamics of commonly used anesthetic agents during the perioperative period. A review of the effects of drugs required by patients during the peri-operative period with and without preexisting medical conditions and their continuation in the perioperative period. A detailed study of Inhalational agents and stages of anesthesia, Opioids, Opioid agonists/Antagonists, Barbiturates and Non-barbiturates, and drug interactions. 4 (4-0) Fa

**Spring**

**BMS 742            Human Physiology II (4 credit hours)**

Prerequisite: permission of instructor. A study of the human cardiovascular and respiratory physiology and related human diseases. Emphasis is on the normal and abnormal functions of the heart, lungs and vascular systems. Consideration of disease etiology, diagnosis and clinical interpretation of the cardiopulmonary and vascular systems. Current research topics will be introduced and discussed. 4(4-0) F

**PBH 730            Biostatistics in Health Sciences**

This course is an introduction to biostatistical methods in the context of public health and medical sciences. Major topics will include: research design and measurement, sampling, exploratory data analysis, probability and sampling distributions, hypothesis testing, contingency table analysis, nonparametric methods, correlation, linear regression, logistic regression and survival analysis. Emphasis will be on developing an understanding of these methods and drawing appropriate conclusions from analysis findings. Students will also be introduced to statistical programming packages. 3(3-0) F,S

**BMS 700            Intro to Grad Studies (informatics)**

Prerequisite: admission to MS in Nurse Anesthesia program. Study of the researcher role, the research process, and research ethics relating to the biomedical sciences. 3(3-0) F,S

**ANE 746            Anesthesia Pharmacology II**

Study of the principles of clinical pharmacology and the pharmacokinetics and pharmacodynamics of commonly used anesthetic agents during the perioperative period. A review of the effects of drugs required by patients during the peri-operative period with and without preexisting medical conditions and their continuation in the perioperative period. Detailed study of Neuromuscular Blocking Drugs, and Local Anesthetics. Introduction to Autonomic Pharmacology and Cardiovascular Pharmacology. 3(3-0) S

**ANE 720            Basics Principles of Anesthesia**

A presentation of the principles and laws of physics and chemistry applicable to the field of anesthesia, anesthesia for obstetrics, airway management, a review of pharmacologic agents used during anesthesia, along with an in-depth analysis of structure and function of the cardiac, respiratory, endocrine, hepatic, renal, neurologic, autonomic, central nervous system, and circulatory systems emphasizing the relationships to anesthesia management. Gain an appreciation for current research in the field of anesthesia. Cover to cover understanding of the textbook Basics of Anesthesia by Stoelting.

**Year Two**

**Summer**

**ANE 897            Research for Scholarly Project**



The capstone project is the culminating experience of the DNAP program, and presents an opportunity for students to investigate a problem relevant to his or her practice in anesthesia. Because nurse anesthesia practice includes administrative and educational roles as well as clinical practice, the project is open to a wide variety of ideas and interests. Students are encouraged to be creative in identifying problems and suggesting corrective actions, solutions must be based on sound evidence. ANE 897 and ANE 898 are consecutive courses to allow the student time to complete the Capstone Project during their anesthesia study periods. The initial class provides direction and approval for the class, while the latter class provides presentation and evaluation of the determined project.

**ANE 735 Clinical Practicum 3 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 714 Orientation to Clinical Anesthesia**

An introduction to anesthesia equipment, anesthesia medications, monitoring equipment, positioning, intravenous considerations, regional techniques, charting, and legal aspects of anesthesia.

**ANE 726 Introduction to Clinical Anesthesia**

Preoperative evaluation of patients, airway management, inhalation techniques, common complications of induction and emergence. Supplemental course fee. 2(2-0) F,S

**Fall**

**ANE 732 Advanced Principles of Anesthesia I**

A review of the special anesthetic considerations for: Professional Aspects of Nurse Anesthesia, inhalation anesthetics, Chronic and Pain Management, IV anesthetics, Monitored Anesthesia Care (MAC), Cardiac Anesthesia, Thoracic Anesthesia, Laparoscopic Anesthesia, Local Anesthetics, Spinal and Epidural Anesthesia, OB Anesthesia, Peripheral Nerve Blocks, and Anesthesia for the Obese Patient.

**ANE 735 Clinical Practicum 4 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 702 Clinical Conference I**

Review of significant cases involving complex anesthesia considerations. 1(1-0) F,S

**Spring**

**ANE 750 Advanced Principles of Anesthesia II**

Prerequisite: ANE 720. A review of the special anesthetic considerations for: anesthesia delivery systems, pre-operative evaluation, monitoring, professional liability, rare and coexisting diseases, hemotherapy and hemostasis, post-anesthesia recovery, minimally invasive procedures, orthopedic, geriatric, outpatient anesthesia, airway

management, respiratory physiology and function, thoracic surgery, neuro surgery, patients with liver and kidney disease, acid-base disturbances, and patients undergoing urologic, ophthalmic, and otolaryngologic surgery. 4(4-0) S

**ANE 735 Clinical Practicum 4 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 803 Human Factors/Pt Safety in Healthcare**

Examines healthcare from a safety perspective. How to facilitate change for caregivers at the "sharp end of the stick" according to the Reason theory of errors. Develops an environment and philosophy of safety. Explores basis of human error, patient safety and quality assurance by introducing a system approach, including crisis management, simulation and teamwork in healthcare.

**ANE 705 Clinical Conference II**

Prerequisite: ANE 702. A review of significant cases involving complex anesthesia considerations. 1(1-0) F,S

**Year Three**

**Summer**

**ANE 735 Clinical Practicum 4 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 806 Professional Practice in Anesthesia**

Emphasizes learning through advanced clinical experiences in anesthesia practice. Explores concepts of nurse anesthesia practice, competence and expertise, incorporating the use of critical thinking skills and reflection as an evaluation method. The focus is on methods of determining best practice through identification of problems, review and systematic evaluation of current research, interdisciplinary collaboration, and consideration of economic and other factors that impact patient outcomes. A professional portfolio will be expected at the conclusion of the program.

**ANE 708 Clinical Conference III**

Prerequisite: ANE 705. Continuing review of significant cases involving complex anesthesia considerations. 1(1-0) F,S

**Fall**

**ANE 735 Clinical Practicum 5 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 807 Anesthesia and Healthcare Policy**

Examines government and non-government issues that influence nurse anesthesia practice. Focuses on development of skills that contribute to leadership and personal effectiveness in implementing change in nurse anesthesia and health care. Emphasizes interdisciplinary relationships between CRNA's nurses, physicians' administrators, policy makers and other key stakeholders that format healthcare policy. Equips students with up-to-date information on various global health topics and perspectives. Prepares readers with a basic perspective of health policy issues in different geographical regions, and explains how global health policy is affected by significant world events. Includes coverage of new infectious diseases, with human rights, stigma of diseases and disclosure. Comparison of health and health care universally.

**ANE 711 Clinical Conference IV**

Prerequisite: ANE 708. Continuing review of significant cases involving complex anesthesia considerations. 1(1-0) F,S

**Spring**

**ANE 735 Clinical Practicum 5 days**

*Prerequisite: Admission to DNAP.*

Clinical experience in the anesthesiology department at multiple clinical sites Specialty content may be included as part of the practicum experience. Repeatable up to 44 total credit hours: Graded Pass/Not Pass only. Hours are based on Clinical Practicum days in the Clinical area. Supplemental course fee.

**ANE 898 Capstone Project Presentation**

The capstone project is the culminating experience of the DNAP program, and presents an opportunity for students to investigate a problem relevant to his or her practice in anesthesia. Because nurse anesthesia practice includes administrative and educational roles as well as clinical practice, the project is open to a wide variety of ideas and interests. Students are encourage to be creative in identifying problems and suggesting corrective actions, solutions must be based on sound evidence. ANE 897 and ANE 898 are consecutive courses to allow the student time to complete the Capstone Project during their anesthesia study periods. The initial class provides direction and approval for the class, while the latter class provides presentation and evaluation of the determined project. 3(3-0) S

**ANE 810 Health and Wellness**

Health and Wellness in the Healthcare setting for the Healthcare provider in modern day medical setting. Healthy coping strategies investigated. Pitfalls of stressors in healthcare with evidence based solutions. Addiction and Recovery for Healthcare professionals reviewed with AANA wellness modules, and peer assistance as well as University assistance for students reviewed. Healthy lifestyles including dietary, mental, physical, spiritual wellness for healthcare providers discussed. 2(2-0) S, F

## **New Program Requests**

### **Doctor of Nurse Anesthesia Practice (DNAP)**

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**Submitted by**

**Department of Biomedical Sciences**

**Missouri State University**

**August 20, 2013**

**Form NP**

**New Program Proposal (form NP)**

**Sponsoring Institution(s):** Missouri State University  
**Program Title:** Doctor of Nurse Anesthesia Practice  
**Degree/Certificate:** DNAP  
**Options:** Post Baccalaureate DNAP (BS to DNAP) and Post-Masters DNAP  
**Delivery Site(s):** Online and Springfield, MO Campus  
**CIP Classification:**  
**Implementation Date:** BS to DNAP—June 2014, Post-Masters to DNAP—June 2014  
**Cooperative Partners:** N/A  
**Expected Date of First Graduation:** BS to DNAP—May 2017, Post-Masters to DNAP— May 2015, May 2016 or May 2017 depending on course of study

**AUTHORIZATION**

Dr. Frank Einhellig, Provost

Name/Title of Institutional Officer	Signature	Date
<u>Dr. Tom Tomasi, Associate Dean of the Graduate College</u>		<u>(417) 836-5169</u>
Person to Contact for More Information		Telephone

Dr. Monika Feeney, Program Director

Individual(s) Responsible for Success of Program < e.g., chair, dean, director >:

**I. Table of contents (optional)**

**II. Executive Summary**

The Department of biomedical sciences at Missouri State University request approval for a new degree, the Doctor of Nursing Anesthesia Practice (DNAP). This degree is a practice oriented degree. The DNAP degree will have two options, a Bachelor of Science to DNAP and the other a Post-master's to DNAP (completion program option). Missouri State University has offered a Master of Science in Nurse Anesthesia (MSNA) specialization degree since 1996. Initially in collaboration with St. John's Hospital now Mercy Hospital and currently offered completely through Missouri State University. The MSNA at Missouri State University is accredited by the Council on Accreditation (COA) for Nurse Anesthesia programs beginning in 2006 through October 1, 2016. The Masters program has graduated a total of 240 graduates with an average 100% first-time pass rate on the national certifying exam. Alumni of the program practice all over the United States with 80% practicing in Missouri or Southwest Missouri many providing services to rural or underserved populations.

The American Association of Colleges of Nursing (AACN) recommended in 2006 that all advanced practice nurses (nurse practitioners, nurse midwives, nurse anesthetists, clinical nurse specialists) must be graduates of doctoral level programs beginning in 2015. The doctorate of nursing practice (DNP) will be the terminal degree for nursing (AACN 2006). This position was endorsed by all AACN member schools. Missouri State University will be transitioning the Master of Science in Nurse Anesthesia (MSNA) to a Bachelor of Science to DNAP degree with Post-Masters completion options.

The American Association of Nurse Anesthetists (AANA) announced August 2007 the support of an advanced clinical degree as entry level for all nurse anesthetists with a target date for complete implementation of 2025 (ref). The transition to doctorate level programs begins in 2015. The degree of the DNAP

will replace the current advanced practice MS NA degree programs in the United States. Currently there are fourteen (14) entry DNAP programs are accepting students (<http://www.all-crna-schools.com/doctor-of-nursing-practice.html> ). Twenty six programs offer clinical doctoral degrees, including completion. (<http://home.coa.us.com/accredited-programs/Pages/CRNA-School-Search.aspx>)

The Council on Accreditation (COA) of Nurse Anesthesia educational programs has determined and published the education standards for Nurse Anesthesia programs (<http://home.coa.us.com/Pages/default.aspx> ). These standards distinguish the competencies for nurse anesthesia practice and identify the knowledge and skills required to prepare for a complex and changing health care environment. This includes patient safety, perianesthesia, leadership, and professional roles and responsibilities in the practice and providing of anesthesia care to the population (COA, May 2013). Education of safe anesthesia care is the cornerstone to outcomes of patient satisfaction, surgeon satisfaction, and of most importance, community satisfaction and safety. CRNA's are the sole providers of anesthesia care in nearly 100% of rural hospitals in the United States.

### **III. Introduction**

### **IV. Alignment With Mission and Goals**

**University mission and goals:** The MSU Long Range Plan (<http://www.missouristate.edu/longrangeplan/commitments.htm>) identifies the overarching commitments in student learning, inclusive excellence, and institutional impact. Specifically related to training advanced practice nurses, the opportunity the DNAP will provide students the opportunity to advance their education and commitment to the public. MSU contributes to this advancement in supporting the transition of the nurse anesthetists training to the clinical doctorate level.

This commitment exemplifies “.....the positive, enduring effects of the University's work in the region and the state as well as to our broader contributions to knowledge and innovation. Essential to this commitment are focused activities in: basic and applied research, economic and community development, community partnerships and advanced workforce development.” The AACN and AANA by supporting the change of entry level educational requirements of advanced practice nurses hope wish to significantly impact the patients (public) in their care with new ideas, solving critical problems and actively participate in the implementation of innovative healthcare practices as learning outcomes from these programs. MSU fully supports this educational preparation to train future healthcare practitioners which falls within the overarching commitments of the University.

**College of Health and Human Services (CHHS) mission and goals:** The CHHS vision for the programs housed in this college is “...to promote and enhance lifelong learning, health and well being”

(<http://www.missouristate.edu/chhs/51903.htm>) of not only the students studying the various degrees supported by the college but extends to the student’s impact on others in the process of their interactions and ultimate career service. The mission of CHHS, “...focuses on improving the health and well-being of people in Missouri, the nation, and the global community through education, research, and service. CHHS values multidisciplinary approaches, instills the public affairs mission, and encourages students and faculty to develop lifelong learning skills.”

The college supports the DNAP via several of the overall college goals:

1. Recruit, develop, and retain faculty and staff who support quality instruction, research and service in accordance with the public affairs mission and University goals
2. Recruit, retain and support quality students who will become engaged citizens committed to using their education to fulfill the CHHS mission
3. Develop, assess and maintain quality educational programs consistent with the CHHS mission and University goals



4. Develop relationships with entities internal and external to the University to support academic programs and to fulfill our public affairs mission
5. Nurture an inclusive educational environment that teaches respect for diverse capabilities, backgrounds, thoughts and values among students, faculty and staff
6. Create and foster an environment that encourages and supports research (with a special emphasis on multidisciplinary and interdisciplinary) for the discovery, application and dissemination of new knowledge.

(<http://www.missouristate.edu/chhs/51903.htm>)

The DNAP practice oriented doctorate will train students, who will ultimately impact the health and well-being of the citizens of Missouri, the nation and the global community. Through the engaged inquiry component of the scholarly work required in the educational requirements of the practice-oriented doctorate students of the program will ultimately change the practice of Certified Registered Nurse Anesthetists (CRNAs) through innovative ideas, critically evaluating current practices and push for implementation of policies and procedures that will impact the safety of all individuals in the care of CRNAs.

Department mission and goals: The DNAP program will be housed in the Biomedical Sciences (BMS) department. The BMS faculty are committed to training future health professionals and practitioners. The mission of the department is "To be an interactive community of scientific scholars dedicated to exploring an evidence-based understanding of human health and disease" (<http://www.missouristate.edu/bms/MissionStatement.htm>). Goals of the department include didactic support for the learning of new knowledge as well as the opportunity for students to participate in engaged inquiry to implement this new knowledge into practice not only at the laboratory bench but also the bedside. The BMS department fully supports the transition of the current graduate program, MSNA to a DNAP. The science and clinical faculty have designed the program within the recommendations of the accreditation standards which are supported by the goals of the BMS department programs and mission.

**1. Need: .**

**A. Student Demand:**

- i. Estimated enrollment each year for the first five years for full-time and part-time students (Please complete table below)**

**Form SE**

Program	Year				
	1	2	3	4	5
BS to DNAP All Full Time	16	18	20	20	20
Post-Masters to DNAP Part Time 1 year 2 year 3 year	10	10	10	10	10
Total	26	44	64	66	70

In June 2014 the BS to DNAP will begin. Current cohort of master's students will be completed and once the final class graduates will no longer be offered. A once a year admission will be implemented. Part time admission is only granted to completion students, and for 10 slots will be available each year. Year 2 10 slots, according to students choice of a one, two or three year completion. A cap of 20 part time slots will be maintained. The expectation is for current masters prepared CRNA's to complete their clinical doctorate within the next 10 years. Numbers are projected to decrease after that time period.

**ii. Will enrollment be capped in the future?**

In the fifth year of the implementation of the DNAP, enrollments will be capped at 20 students per year in the BS to DNAP program, all will be full time students. The Post-Master's option will be capped at 10 for 1 year option, 5 for 2 year option, and 5 for 3 year option. The Post-Masters options will be phased out over three years. Potential future enrollments in the BS to DNAP beyond the five (5) year projections will need to be determined by the environment at that time and the availability of an applicant pool that is qualified, facilities, fiscal resources and faculty resources to be able to facilitate appropriate ratios of faculty to students. Market need and job placement will also need to be considered.

**iii. Please provide a rationale regarding how student enrollment projections were calculated**

Enrollment projections were based on the current MSNA student numbers. Currently the MSNA program recruits, interviews and chooses two cohorts per academic year of seven (7) each for a total per academic year of fourteen (14). The increase in projections was based on the current number of applications received per MSNA opening. The number of applications that MSU received for seven (7) potential student openings is 30. The enrollment will be maintained at a reasonable level in order to maintain quality clinical placements for the completion of required types of clinical experiences. The CoA also reviews number of students to maintain market need and job placement. MSU graduates currently has a 100% job placement post graduation.

**Current Student Demand.** Missouri State University MSNA program has always had student demand for its quality program that maintains its small size and quality education and clinical experiences. Applications have far outnumbered each class size since 1952. The demand is already evident for the DNAP indicated by the number of inquiries that we have fielded in our office sometimes on a weekly basis. Students are looking for schools that provide the clinical doctorate, since it will be the entry into practice degree in 2025.

## **B. Market Demand:**

### **i. National, state, regional, or local assessment of labor need for citizens with these skills.**

**National:** Currently in the United States, there are hundreds of open positions. One most frequently used job site:

<http://gaswork.com/search/CRNA/Job/All> currently shows 571 pages of 25 jobs per page seeking CRNA's. Multiple recruiting agencies are included, and hospitals as well do independent recruiting.

**State:** Missouri has needs that are filled by our program historically, giving our state excellent anesthesia care. Our state association posts positions as well, which can be viewed at: <http://moana.org/jobs/>. Currently greater than 25 positions are listed.

**Regional:** We are part of Region 4 of the AANA (American Association of Nurse Anesthetists) a 9 state area, Midwestern and much rural anesthetic need. Arkansas, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota. Currently more CRNA's are needed. CRNA's work independently in many of these states, and need is high. Currently 77 pages with 25 positions per page are listed on the above website.

**Local:** Local needs this year have exceeded what our school can provide. 10 positions were available at a local hospital.

- ii. **Support letter(s) from potential employers (optional; append to**

**C. Societal Need:**

- i. **General needs which are not directly related to employment**

Rural healthcare uses almost exclusively CRNA's to provide anesthesia to surgical patients. The need is great, and as healthcare continues its course of change, advanced practice providers will become more involved in patient care. CRNA's are already sole providers in many Missouri counties.

- ii. **Support letter(s) from community leaders (optional; append to proposal)**

**D. Methodology used to determine "A" and "B" and "C" above.**

AANA research numbers can be viewed on the AANA website.

(<http://www.aana.com/aboutus/Pages/default.aspx>). The state anesthesia association, MoANA, provides a map of independent CRNA providers by county. (<http://moana.org/>)

**2. Duplication and Collaboration (Form CL):**

Because of the mandate from AACN, supported by AANA, that requires graduates of advanced practice nursing programs be qualified with a terminal degree of DNP, specifically DNAP by 2025 (for nurse anesthetists), there will necessarily be duplication as all programs work to comply with the accreditation standards. Duplication is required to meet workforce needs of healthcare providers. The professional mandate increases the level of education but the number of programs would not be expected to increase as all institutions work to transition current master's level programs to clinical doctorate programs. Programs at the masters level have a steady stream of applicants interested in this level of training and the transition to a DNAP is not expected to change the number of interested applicants.

Currently in the state, there are 4 anesthesia schools. None are currently providing a DNAP. One has a program, that is housed in a school of nursing is offering a DNP

however they are not yet accredited by our CoA.

(<http://www.trumed.org/trumedweb/crna/CRNA-design.asp>)

The DNAP program at Missouri State University will harness inter- and intra-department efforts. The MSU DNAP program does not anticipate collaborations with other universities in the offering or delivery of the MSU DNAP program.

### **3. Program Structure (form PS):**

Missouri State School of Anesthesia DNAP begins by having one year of didactic instruction. Basic sciences, and ethics and leadership begin the journey. Basic anesthesia begins in the first year, as well as Pharmacology I and II prior to any clinical time. Anesthesia (ANE) instruction continues as clinical begins and added distance classes enrich the doctoral program by adding classes such as ANE 803 Human factors and patient safety, ANE 806 Professional Practice in Anesthesia, ANE 807 Anesthesia and Healthcare and ANE 810 Health and Wellness. All Anesthesia classes remain the same from the masters to the doctorate, with the exception of additional Anesthesia Pharmacology and the focus of research being more encompassing of clinical anesthesia. Total credits increased from 66 in the Master's Program to 118 in the Doctoral program The Post-Masters DNAP option will admit advanced practice nurses (CRNAs) who already have a master's degree in Nurse Anesthesia. These students will be required to complete additional 26 credit hours, the difference between the master's level and DNAP requirements.

The accredited Master's Degree is focused on anesthesia, and the new doctoral degree maintains the same dedication with significantly more anesthesia hours. Clinical hours remain the same. The doctoral program will be a once a year admission and cohort, and will allow transfer of credits into the program of up to 6 graduate hours in any class except ANE classes. Additional difference include evidence based practice is built into the DNAP program beginning with the research and capstone project. Leadership instruction, professional practice material, ethics and safety in practice are all classes, which are added. The capstone project differs from the current research requirement by adding outcome criteria that are evidence based and fostering development of a culture and lifetime of continuing education in anesthesia.

Students with a bachelor's degree (BS to DNAP) will need to complete a 118 credit hour program which includes the 66 credit hours currently in the master's program. For both options the DNAP curriculum focus will include the following emphasis

areas: evidence based practice is built into the DNAP program beginning with the research and capstone project. Leadership instruction, professional practice material, ethics and safety in practice are all classes, which are added. The capstone project differs from the current research requirement by adding outcome criteria that are evidence based and fostering development of a culture and lifetime of continuing education in anesthesia

**DNAP Degree Requirements: Form PS**

**Post-Master's DNAP Option**

- A. What are the total credits required for graduation? 26**
- B. Are there any residency requirements?** Each class will require on campus time of 3 hours at the beginning and end of each class.

Total Credits by Category

**C. General Education courses: Total credits required: None**

**D. Major requirements: total credits required: 26**

List of classes that contribute to this total

<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>
ANE 897	Research for Scholarly Project	3
ANE 803	Human Factors/Pt Safety in Healthcare	3
ANE 806	Professional Practice in Anesthesia	3
ANE 807	Anesthesia and Healthcare Policy	3
ANE 810	Health and Wellness	2
ANE 898	Capstone Project	3
PHI 613	Bioethics	3
NUR 800	Leadership and Evidence Based Practice	3
ECO 604	Healthcare Economics	3

Total above should be the same as item 3.C.

**E. Free elective credits: 0 (Sum of C, D, and E should equal A)**

**F. Describe any requirements for thesis, internship or other capstone experience.** The DNAP clinical courses (ANE 897, ANE 897, and ANE 898)



progress students through producing a scholarly capstone projects as the ultimate outcome.

**G. Describe any unique features such as interdepartmental cooperation.**

Several courses will be taught by faculty with appropriate expertise in other departments such as philosophy, economics, public health and nursing.

**BS to DNAP Option**

**A. What are the total credits required for graduation? 118 credit hours**

**B. Are there any residency requirements? 85 hours are on campus, with 33 being distance. The distance classes require one minimal on campus time. Distance being defined as either the instructor or student not being in the classroom at the same time.**

**C. General Education courses: Total credits required: None**

**D. Major requirements: total credits required: 118**

List of classes that contribute to this total

<b>Course ID</b>	<b>Course Title</b>	<b>Credits</b>
ANE 897	Research for Scholarly Project	3
ANE 744	Anesthesia Pharm I	4
ANE 746	Anesthesia Phar II	3
ANE 720	Basics of Anesthesia	3
ANE 714	Orientation to Clinical Anesthesia	1
ANE 726	Introduction to Clinical Anesthesia	2
ANE 732	Advanced Principles of Anesthesia I	6
ANE 702	Case Conference I	1
ANE 750	Advanced Principles of Anesthesia II	4
ANE 705	Case Conference II	1
ANE 803	Human Factors/Pt Safety in Healthcare	3
ANE 708	Case Conference III	1
ANE 806	Professional Practice in Anesthesia	3
ANE 807	Anesthesia and Healthcare Policy	3
ANE 711	Case Conference IV	1

ANE 810	Health and Wellness	2
ANE 898	Capstone Project	3
PBH 730	Biostatistics	3
BMS 742	Human Physiology II	4
BMS 700	Intro to Grad Studies (informatics)	3
BMS 620	Medical Cell Biology	3
BMS 728	Adv. Anatomy and Neurophysiology	3
PHI 613	Bioethics	3
NUR 734	Advanced Physical Assessment	5
NUR 800	Leadership and Evidence Based Practice	3
ECO 604	Healthcare Economics	3
ANE 735	Clinical Practicum (SU)	3
ANE 735	Clinical Practicum (FA)	8
ANE 735	Clinical Practicum (SP)	8
ANE 735	Clinical Practicum (SU)	5
ANE 735	Clinical Practicum (FA)	10
ANE 735	Clinical Practicum (SP)	10

Total above should be the same as item 3.C.

**E. Free elective credits: 0**

**F. Describe any requirements for thesis, internship or other capstone experience.** The DNAP clinical courses (ANE 897, ANE 897, and ANE 898) progress students through producing a scholarly capstone projects as the ultimate outcome.

**G. Describe any unique features such as interdepartmental cooperation.** Several courses will be taught by faculty with appropriate expertise in other departments such as philosophy, economics, public health and nursing.

**4. Financial Projections (for public institutions only; Form FP):**

Please complete table at the end of this document. Additional narrative may be added as needed. If more than one institution is providing support, please complete a separate table for each institution.

**Budget Narrative**

### **One-Time Expenditures**

**Space** is a onetime large expenditure that is in the planning phase of the University's building projects. Alumni meeting also encourage alumni to participate and be part of the University foundation to give resources to our school.

**Library fees** are expected to be minimal, our library currently has wonderful resources for our current master's program, and online resources are expected to grow allowing students access to periodicals and search engines, expected increase of 1000.00

**Accreditation fees** to the Council on Accreditation of Nurse Anesthesia Schools will be a one-time fee of \$7500.00, with yearly fees depending on number of students.

**Consultant fees** have already been paid. The school of anesthesia was a joint ownership with St. John's hospital until January 2013. University acceptance of the program was pivotal on being able to transition to a clinical doctorate, since masters programs are being phased out. A consultant was hired, and his report is available for review upon request, prior to MSU accepting ownership of the anesthesia program.

**Equipment** no new equipment is immediately expected. Current equipment is maintained and cared for carefully. Year 3, an Ultrasound machine purchase is listed.

### **Recurring Expenditures**

#### **Faculty:**

4 faculty FTE's which include one Program Director, one assistant Program Director and 2 didactic faculty. CoA requirement are for CRNA's to occupy these positions. Assistant program director and faculty are 0.8 to allow one clinical day per week to maintain anesthesia skills and service.

2 staff also divided by 1/3 for year one due to students in the Masters program, and 2/3 second year

2 per course instructors

Year 4 an additional staff is expected as clinical site need and paperwork, credentialing is increased, and 3<sup>rd</sup> FTE added for faculty

For year one only 1/3 of the total is counted as an expenditure, because the faculty are teaching 2/3 of the class in the remaining master's program.

For year two, 2/3 and the full expense on year 3 when there are no more master's students.

**Other fees:** Year three accreditation fees are expected to decrease by 10,000.00 due to clinical sites being in place, no new site fees.

## Revenues

Student tuition as follows: 118 hours total for the BS to DNAP are divided as follows:

85 hours regular tuition of \$272 (23,120): 33 hours distance tuition of \$300 hours (9900) of distance learning and the approved program fee of 2500 a semester (22,500). Making the total not including lab fees or student fees total 55,520. The financial table calculation is based on this figure divide by 3 since we have a 3 year program and credit hours per year are within 1 to 2 credit of each other. Per year fee 18,506.67 (55,520 / 3)

Part time students are as follows

10 part time spots are planned for year one, tuition is calculated as follows:

2 year plan:

First year 17 hours all distance (5100)

Second year 9 hours all distance (2700)

Program fee is purposed, 1000 per class. (9000) making the total per student for the completion program \$16,800.

3 year plan:

First year 8 hours (2400)

Second year 9 hours (2700)

Third year 9 hours (2700)

Program fee 1000 per class (9000)

Total per student for completion \$16,800

## 5. Program Characteristics and Performance Goals (form PG).

For collaborative programs, responsibility for program evaluation and assessment rests with the institution(s) granting the degree(s).

Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.

### A. Student Preparation

- The BS to DNAP option will consider applicants who plan to be full time students. Admissions procedures and qualifications that exceed regular Missouri State requirements are listed below. Selective admission will apply based on the limited number of students the BS to DNAP can accept and the qualifications of the applicants.

#### BS to DNAP

- Any special adm <http://moana.org/issions> procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

#### **Admission requirements**

- In order to be considered for admission into the Missouri State School of Nurse Anesthesia you must have completed the following requirements.

#### **Entrance Requirements**

- All applicants must meet the following requirements:
- A bachelor's degree in an area of life sciences, nursing, or chemistry from an accredited institution in the U.S. or equivalent training in a foreign university

- Undergraduate work must include inorganic chemistry (4 hrs), organic chemistry (4 hrs), microbiology, human anatomy, human physiology; and genetics (strongly recommended)
- A minimum GPA of 3.00 on a 4.00 scale for the last 60 hours of undergraduate course work. Emphasis will be placed on science courses
- Submission of official Graduate Record Examination (GRE) scores taken no earlier than five years prior to application with a preferred minimum score of 153 in Verbal Reasoning, 150 in Quantitative Reasoning, and 3.5 in Analytical Writing, or successful passing of the CCRN exam.
- Current licensure as a registered nurse in the U.S.
- A minimum of one year experience in an acute care setting is required; preferences may be given to applicants with more experience. Contact the clinical program director regarding questions about appropriate nursing experience
- Current BLS, ACLS, PALS certification are required
- A personal interview with a screening committee
- Students admitted into the program will be required to undergo a criminal background check before matriculation
- Upon acceptance to the program, the student will pay \$200.00 to the AANA for an associate membership (American Associate of Nurse Anesthetists)
- In addition, to the admission requirements you must also have completed the application and admission requirements for both the Missouri State University Graduate College and the Missouri State University School of Nurse Anesthesia. Students accepted into the program will also have to pay a confirmation deposit as a placeholder in the program.

### **Admission to the Graduate College**

- Before you can be admitted in to the nurse anesthesia program you must submit an application along with a \$35 application fee and be accepted to the Graduate College at Missouri State University. You should also submit your GRE scores as this time.
- Admission to the School of Anesthesia at Missouri State

**Application checklist:**

- Completed application to Missouri State School of Anesthesia **AND** completed application to MSU Graduate College
- Essay on why you are qualified for admission, nursing history, goals. No more than 250 words double spaced.
- Copies of Certifications (**Nursing license, BLS, ACLS and PALS**)  
GRE scores
- Current Resume/Curriculum Vitae
- Non-refundable application fee of \$25.00 (This must be a check made payable to Missouri State School of Anesthesia.)
- Please note: MSU Graduate School and the School of Anesthesia have two separate application fees and two separate addresses!!!
- References: 3 letters of recommendation from non-relative medical professionals, including your current supervisor. These should be on official letterhead and signed by the professional.
- Official transcripts from each institution must be sent to Missouri State School of Anesthesia **and** Missouri State University Graduate College. **Transcripts must include the five prerequisite courses: Microbiology, Anatomy, Physiology, Inorganic AND Organic Chemistry. These five classes ARE mandatory!**
- Signed Agreement/Authorization form
- Confirmation Deposit
  - Students accepted into the program will be required to pay a \$500 placeholding fee known as the Confirmation Deposit.
- Characteristics of a specific population to be served, if applicable.

### **MSNA to DNAP**

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.

#### **Admission requirements**

- In order to be considered for admission into the Missouri State School of Nurse Anesthesia you must have completed the following requirements.

#### **Entrance Requirements**

- All applicants must meet the following requirements:
- Completed application to Missouri State School of Anesthesia **AND** completed application to MSU Graduate College
- Essay on why you are qualified for admission, goals, preparation and interest in anesthesia and the DNAP. No more than 250 words double spaced.
- Copies of Current Certifications (**Nursing license, Advance Practice License, BLS, ACLS and PALS**)
- Hold a current unencumbered CRNA license from a state within the United States.
- Current Resume/Curriculum Vitae that identifies all previous anesthesia, leadership, community involvement as well as other activities or experiences.
- Have a cumulative GPA of Masters coursework of 3.25 (on a 4.00 scale) or above. Students who have less than a 3.25 cumulative GPA must submit GRE score not more than 2 years old to be considered on an individual basis, or passing of the CCRN exam.
- Submit evidence of current health insurance
- Submit evidence of current immunizations or immune status (MMR, Tetanus, Varicella, Hepatitis B series) and PPD within one year (or



- chest X-ray or documentation of appropriate follow up to PPD positive individuals)
- Be prepared to meet the requirements of the online portion of the program both mentally and technologically. (Computer and internet access is required)
  - Non-refundable application fee of \$25.00 (This must be a check made payable to Missouri State School of Anesthesia.)
  - **Please note: MSU Graduate School and the School of Anesthesia have two separate application fees and two separate addresses!!!**
  - References: 3 letters of recommendation from non-relative medical professionals with a master's degree or higher that address the applicant's potential as a clinician, leader, and scholar. These should be professional letters on official letterhead and signed by the professional.
  - Official transcripts from each institution must be sent to Missouri State School of Anesthesia **and** Missouri State University Graduate College.
  - Complete a minimum of one year of clinical experience, more is preferred.
  - An interview by invitation.
  - Signed Agreement/Authorization form.
  - Confirmation Deposit
    - Students accepted into the program will be required to pay a \$500 place holding fee known as the Confirmation Deposit.

## **B. Faculty Characteristics**

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.

- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.
- Expectations for professional activities, special student contact, teaching/learning innovation.
  - **Clinical Faculty:** Missouri State School of Anesthesia has clinical faculty that are CRNA's at each clinical site that report to the CRNA or MD site coordinator. All students are paired 1-1 with a CRNA during clinical time. During the senior rotation students may be directly supervised and instructed by an MD, never more than the CoA approved 2:1.
  - **Doctoral Prepared Faculty:** All classroom instruction is provided by faculty that are doctoral prepared. The basic science faculty have PhD's in their respective fields, and the ANE faculty are currently in process of obtaining their DNP or DNAP and will be complete when the accreditation portion of approval is complete next year.
  - Scholarly activity or Capstone anesthesia projects evaluation and mentoring for the students are divided among the anesthesia faculty. In addition the student will select one committee member that is a CRNA or MD in anesthesia to mentor the student and their project with interest in the capstone project. The student is responsible for selecting that mentor, and the mentor must receive adjunct faculty status at the University to be a committee member. The committee chair will be one of the current anesthesia faculty. The PhD faculty will provide mentoring and resources for Science based projects as requested by the students. The Director of Doctoral Education /Program Director will approve all projects prior to their implementation and submission of idea and plan.
  - Anesthesia Didactic faculty are given one day per week to complete their clinical responsibilities. Time is better allotted in the doctoral program to allow instructors time for service and scholarly activity by

maximizing graduate teaching of no more than 9 hours graduate level teaching per academic semester.

**C. Enrollment Projections (repeat section 1.A.i)**

Currently there are 35 students enrolled in the MSNA program, all enrolled as full-time students. The Post-masters DNAP will admit full (one year option) and part-time students with options of one (1) two (2) or three (3) year completion options. This is to accommodate situations after admission to the Post-master's program. At the end of five years it is projected that 20 students will be full-time and 20 students will be part-time. At the end of five years the projections 40. Over time the Post-masters options will attenuate when the situation has saturated and the demand for the completion program decreases or is no longer needed. At this point the completion program, Post-masters will be discontinued.

- Student FTE majoring in program by the end of five years.
- Percent of full time and part time enrollment by the end of five years.

**D. Student and Program Outcomes**

- Number of graduates per annum at three and five years after implementation.
- Special skills specific to the program.
- Proportion of students who will achieve licensing, certification, or registration.
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.
- Placement rates in related fields, in other fields, unemployed.
- Transfer rates, continuous study.

**E. Program Accreditation**

Institutional plans for accreditation, if applicable, including accrediting agency and timeline.

- The Missouri State University School of Anesthesia housed in the Biomedical Sciences Department will seek accreditation from the Council on Accreditation (COA) for Nurse Anesthesia Education programs in 2013. The AANA developed guidelines and criteria for DNAP programs which were followed here in developing the MSU DNAP programs. The MSU graduate MSNA program is current and accredited through 2016.

**F. Alumni and Employer Survey**

- Expected satisfaction rates for alumni, including timing and method of surveys. Currently of the returned alumni and employer surveys 100% feel they are prepared to enter the workforce, and employers feel our alumni are very prepared. Currently in the masters program, one and two year post graduation surveys are sent out, and that evaluation process will be continued in the doctoral program.
- Expected satisfaction rates for employers, including timing and method of surveys

**6. No Program Specific Accreditation: N/A**

If accreditation is not a goal for this program, provide a brief rationale for your decision. If the institution is seeking program accreditation, provide any additional information that supports your program.

**7. Will this program be offered primarily at an off-campus location? No**

**8. Institutional Characteristics:**

Please describe succinctly why your institution is particularly well equipped or well suited to support the proposed program.

Missouri State University is a public institution with over 25,000 students at the undergraduate and graduate levels. These students are located on four campuses. Springfield campus is a selective-admission comprehensive university with 150

undergraduate programs. At the graduate level, Missouri State has over 3,500 graduate students enrolled in 44 masters programs, two clinical doctorates, a specialist in education administration, and a collaborative doctorate in educational leadership. The University employs more than 4000 faculty and staff with upwards of 90% of tenure track faculty holding the most advanced degree in their respective disciplines.

Missouri State University is well-suited to support the development, accreditation, and implementation of the DNAP clinical doctorate program. Current accredited clinical doctorates at Missouri State University include; Audiology, Physical Therapy and a collaborative doctorate in education. The Biomedical Sciences Department and the Missouri State University School of Anesthesia has a simulation laboratory that is a full mock-up of an operating room that supports clinical learning experiences. The Department submitted a competitive application to HRSA (Health Resources and Service Administration, (<http://www.hrsa.gov/index.html>) for a Nurse Anesthesia training (NAT) grant specifically to support the training of students in the MSNA program by helping with tuition awards.

Missouri State University has excellent support for online delivery of courses and programs. Resources include a 24-hour computer help desk, extensive library resources available electronically via online, significant hardware and software support services. Blackboard is used extensively, the Missouri State University Faculty Center for Teaching and Learning (FCTL; <http://www.missouristate.edu/fctl/>) has a wealth of resources for faculty. The College of Health and Human Services (CHHS) has recognized the need for clinical programs to offer distance access to students who are participating in clinical practicums. To facilitate programs, CHHS has developed its own additional support for faculty with a college central MediaSite equipped seminar room to capture lectures and a computer lab facility available for exams in blended format courses. The Missouri State University MSNA program has been offering online delivery of content coincident with student placement in distant clinical sites (more than two hours travel from campus).

The current graduate MSNA program has been offered either jointly or fully from Missouri State University since 1996 with the program being fully accredited and in complete compliance with all rules and regulations of the COA. The full transition of the MSNA program to Missouri State University has provided for expanded graduate student support at the University. Compliant with accreditation, students in the program have access to the library (at MSU and Mercy Hospital), financial services, graduate college, and other support services available to enrolled students. The MSNA program has a detailed student handbook, detailed policy book, outlined details for research and scholarly work, and support of department faculty to achieve their academic goals.

The faculty of the School of Anesthesia, are well qualified to initiate and implement the DNAP as an extension of the current MSNA program. All full-time faculty to be involved in teaching in the DNAP program either have research or clinical doctorates or are working on these credentials. Student success is expected to continue as currently experienced in the School of Anesthesia. Clinical experiences are varied and enrich the students learning environment. Didactic instruction is rigorous and pertinent to the field of anesthesia. The goal and purpose is to provide safe, excellent anesthesia providers for our community. To promote cultural diversity in our students to match our patient population, and to advance the field of anesthesia by service, investigation and scholarly work.

#### **9. Any Other Relevant Information**

A clinical doctorate is required for entry into practice by the only Nurse Anesthesia accreditation agency, CoA. Masters programs will not be credentialed to admit anesthesia students after the year 2025. Current student applicants are searching for programs that allow credentialing to be at the highest level. Missouri State University has the resources and responsibility to offer that to our students, and ultimately our community, state and region.

Financial information (Section 5)

10. Need:

A. Student Demand:

- i. Estimated enrollment each year for the first five years for full-time and part-time students (Please complete table below)

Form SE	Year				
	1	2	3	4	5
Full Time	16	16+18	16+18+20	18+20+20	20+20+20
Part Time	10	10	10	10	10
Total	26	44	64	66	70

From FP

Financial information (Section 5)

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>1. Expenditures</b>					
<b>A. One-time:</b>					
New/renovated space	yes				
Equipment	0				
Library	1000				
Consultants	completed				
Other					
Total for One-time Expenditures	1000 +				
<b>B. Recurring:</b>					
Faculty	159,340.00	318,670.00	580,000.00	580,000.00	580,000.00
Staff	16,667.00	33,334.00	75,000.00	75,000.00	75,000.00
Benefits					
Equipment	0	0	30,000	0	0
Library	0	0	0	0	0
Other (Accreditation fees, supplies, advertisement)	47,000.00	47,000.00	37,000.00	37,000.00	37,000.00
Total for Recurring Expenditures	208,007.00	399,004.00	722,000.00	692,000.00	692,000.00
<b>TOTAL (A + B)</b>	<b>209,007.00</b>	<b>399,004.00</b>	<b>722,000.00</b>	<b>692,000.00</b>	<b>692,000.00</b>
<b>2. Revenues</b>					
*State Aid - CBHE	0	0	0	0	0
*State Aid - DESE	0	0	0	0	0
Tuition/Fees FT	176,106.72	374,226.78	594,360.18	616,373.52	660,400.20
PT	51,000.00	51,000.00	51,000.00	51,000.00	51,000.00

Institutional/Resources					
Other : Program Fees FT PT	120,000.00 9000.00	255,000.00 9000.00	405,000.00 9000.00	435,000.00 9000.00	450,000.00 9000.00
TOTAL REVENUES	356,105.72	689,226.78	1059360.20	1111373.52	1170400.20

\*Please provide a brief description of the nature of the state aid. Is "new" money requested or is "old" money going to be used? What is the nature of the "old" money? Currently the program is financially self supported.

**4a Business and Marketing Plan: Recruiting and Retaining Students**

- Describe the initial marketing plan for the new degree program. Describe how you will attract new students to campus and to the proposed program. Include the names and positions of the individuals responsible for marketing the program.
- Project how the program will grow over time and how marketing will change as the program grows.
- Estimate the costs for marketing and include them in the budget.
- Describe plans to retain students through graduation.
- Describe plans to ensure program enrollment outcomes are achieved.

Marketing for the new degree will be advertised in the Missouri Nurses quarterly periodical, as the current MS program is advertised. Free booth rental is given to school at the twice a year state meeting for MoANA (Missouri Association of Nurse Anesthetists). The AANA lists all accredited schools, with a link to the school website. In the last 60 years the school of anesthesia has had 70% more applications than could be accepted, without any advertising except word of mouth. Currently we have over 600 graduates that practice anesthesia in all capacities, our alumni are our best recruiting tools. Attrition rate is low less than 1 percent, our students are highly motivated and in the last 10 years student retention has been 99% with the only attrition being due to academic failure according to School of Anesthesia guidelines. Board pass rates remain higher than the CoA minimum standards, currently 100%. Student selection is rigorous and therefore outcomes are not expected to change with increase in academic



requirements. Marketing costs are estimated at \$5000.00 a year, which include maintaining clinical sites for the students. Clinical preceptors are volunteer, and are providing service by giving back to their profession. Clinical site retention is more of a concerning issue than student retention.

Completion program enrollment is expected to be greater for the first 10 years, and then as most masters prepared CRNA's have completed their transition will be phased out.

#### **4b. Institutional Capacity**

- **Project the burden of the program on existing resources. Provide evidence that there are sufficient students and funds available to implement and sustain a high quality program without compromising the quality of existing programs.**

Currently 7 students are accepted twice a year, the new DNAP program will begin June 2014 with 16 students, and increase of 2 students. The program is self-supporting, and brings funds, students, ideas, projects to the University. Once the maximum of 20 students per class is reached enrollment is expected to be capped. Market review, and job placement as well as board pass rates are mandatory to be published on the school website by the anesthesia accrediting agency. Quality is of utmost importance, and is evaluated by both clinical and didactic evaluation.

## References

American Association of Colleges of Nursing (AACN), 2006, The essentials of doctoral education for advanced nursing practice. Washington, D.C.

<http://www.aacn.nche.edu/publications/position/DNPEssentials.pdf>

American Association of Nurse Anesthetists, Position Statement (2007)

<http://www.aacn.nche.edu/publications/position/DNPpositionstatement.pdf>

Doctor of Nurse Anesthesia Practice, the DNAP (2009) <http://www.dnap.com/>

[http://www.dnap.com/Doctor\\_of\\_Nurse\\_Anesthesia,\\_DNA.html](http://www.dnap.com/Doctor_of_Nurse_Anesthesia,_DNA.html)

Council on Accreditation of Nurse Anesthesia Educational Programs

<http://home.coa.us.com/Pages/default.aspx>

Standards for Accreditation of Nurse Anesthesia Programs, Practice Doctorate (May 2013)

[http://home.coa.us.com/Documents/Practice%20Doctorate%20Standards\\_Draft%202.pdf](http://home.coa.us.com/Documents/Practice%20Doctorate%20Standards_Draft%202.pdf)

## Practice-Oriented Doctoral Degree Criteria

Doctoral students master additional theory and knowledge in an area of academic focus for the discipline in which the degree is awarded (Standard III).

1. Doctoral students achieve advanced scholarship skills relevant to the area of academic focus (Standard III).
2. Doctoral students complete a scholarly work that demonstrates knowledge within the area of academic focus (Standard III).
3. Faculty members demonstrate competency in scholarly and professional work in the relevant discipline (Standard III).

(Standard III: THE PROGRAM CURRICULUM IS RELEVANT, CURRENT, COMPREHENSIVE, AND MEETS COMMONLY ACCEPTED NATIONAL STANDARDS FOR SIMILAR DEGREES. THE TEACHING/LEARNING ENVIRONMENT PROMOTES THE ACHIEVEMENT OF EDUCATIONAL OUTCOMES DRIVEN BY THE MISSION OF THE INSTITUTION AND FOSTERS STUDENT LEARNING, PROFESSIONAL SOCIALIZATION, AND FACULTY GROWTH. THE CURRICULUM PREPARES GRADUATES FOR THE FULL SCOPE OF NURSE ANESTHESIA PRACTICE) There are 21 sections to this standard.

1. Programs must offer either a Doctor of Nursing Practice (DNP) or Doctor of Nurse Anesthesia Practice (DNAP) degree unless a waiver for this requirement has been approved by the COA. (+)
2. Faculty members demonstrate competency in scholarly and professional work in the relevant discipline (Standard III).
3. Doctoral students have sufficient access to appropriately credentialed faculty (Standard II).

Standard II:

(THE CONDUCTING INSTITUTION DEMONSTRATES THAT RESOURCES ARE SUFFICIENT TO PROVIDE ONGOING COMMITMENT AND SUPPORT OF THE NURSE ANESTHESIA PROGRAM)

There are 6 sections to this standard.

4. There is an established assessment procedure to verify competence in pertinent scholarship skills relevant to the area of academic focus (Standard III).
5. The post-baccalaureate curriculum is a minimum of 3 years of full-time study or longer if there are periods of part-time study (Standard III).\*\*
6. The requirements for the practice-oriented doctoral degree are significantly beyond those required for a master's degree (Standard III).
7. Doctoral students master additional theory, knowledge and scholarship skills relevant to the area of academic focus by demonstrating the following competencies (Standard III):

#### Biological Systems, Homeostasis and Pathogenesis

- a. Analyzes best practice models for nurse anesthesia patient care management through integration of knowledge acquired from arts and sciences within the context of the scope and standards of nurse anesthesia practice.
- b. Uses a systematic outcomes analysis approach in the translation of research evidence and data in the arts and sciences to demonstrate they will have the expected effects on nurse anesthesia practice.

#### Professional Role

- a. Demonstrates ability to undertake complex leadership roles in nurse anesthesia.

- b. Demonstrates ability to provide leadership that facilitates intraprofessional and interprofessional collaboration.
- c. Integrates critical and reflective thinking in leadership style.
- d. Demonstrates ability to utilize a variety of leadership principles in the management of situations.

### Healthcare Improvement

- a. Uses evidence based practice to inform clinical decision making in nurse anesthesia.
- b. Evaluates how public processes impact the financing and delivery of healthcare.
- c. Develops and assesses strategies to improve patient outcomes and quality of care.

### Practice Inquiry

- a. Demonstrates the ability to assess and evaluate health outcomes in a variety of populations, clinical settings, and systems.
- b. Demonstrates ability to disseminate research evidence.
- c. Completes a scholarly work that demonstrates knowledge within the area of academic focus.

### Technology and Informatics

- a. Uses information systems/technology to support and improve

patient care and healthcare systems.

- b. Critically evaluates clinical and research databases used as clinical decision support resources.

#### Public and Social Policy

- a. Advocates for health policy change to improve patient care and advance the specialty of nurse anesthesia:

#### Health Systems Management

- a. Analyzes the structure, function and outcomes of healthcare delivery systems and organizations.
- b. Analyzes business practices typically encountered in nurse anesthesia delivery settings.
- c. Analyzes risk management plans based on information systems to promote outcome improvement for the patient, organization and community.

#### Ethics

- a. Applies ethically sound decision-making.
- b. Informs the public of the role and practice of the doctoral-prepared CRNA and represents themselves in accordance with the *Code of Ethics for CRNAs*.
- c. Fulfills the obligation as a doctoral-educated professional to uphold the *Code of Ethics for CRNAs*.

**\*\*Note:** Shorter programs of study can be submitted for consideration when accompanied by supporting rationale that ensures compliance with accreditation standards.

**(+)** All programs must be in compliance with this criterion by January 1, 2015.