

Reflecting Christ in Anesthesia Education

COURSE DESCRIPTIONS



DOCTOR OF NURSE ANESTHESIA PRACTICE (DNAP) PRACTICE DOCTORATE PROGRAM

www.mtsa.edu

315 Hospital Drive, P.O. Box 417, Madison, TN 37116

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DACP 800: CLINICAL PRACTICUM I

This initial clinical course is designed to integrate clinical practice with basic didactic coursework. Students are assigned to affiliated clinical sites with designated anesthesia areas. Students are introduced to anesthesia equipment, procedures, medications and the perioperative environment. A proper understand of basic anesthesia equipment, and monitors will allow the student to expound basic nursing principles to the anesthesia environment. Students are required to meet or exceed level specific objectives and experiences which build from simple cases and techniques to the more complex cases and procedures. Clinical experience will be guided by certified registered nurse anesthetists and anesthesiologists. Credits: 4.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D12, D13, D14, D15, D17, D18, D19, D20, D21, D22, D23, D25, D26, D27, D28, D29, D32, D33, D34, D35, D36, D37, D38

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DACP 810: CLINICAL PRACTICUM II

This second clinical course is designed to integrate with more advanced didactic coursework with focus on pathophysiology. Students will experience more advanced anesthetic techniques, and initiate call responsibilities. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to more complicated cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and anesthesiologists.

Credits: 4.00 Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D12, D13, D14, D15, D17, D18, D19, D20, D21, D22, D23, D25, D26, D27, D28, D29, D32, D33, D34, D35, D36, D37, D38

DACP 810: CLINICAL PRACTICUM II

The second clinical course is designed to integrate more advanced didactic coursework. Students experience more advanced anesthetic techniques at assigned affiliate clinical sites. Students are assigned to more complicated cases and are required to meet or exceed levelspecific objectives. Clinical experiences are guided by certified registered nurse anesthetists and physician anesthesiologists.

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DACP 820: CLINICAL PRACTICUM III

The third clinical practicum course is designed to build on more advanced didactic coursework including in depth pathophysiology, applied pharmacology and specialty case management. Case specific focus should focus on the continued development with more common surgical procedures and exposure to more complex surgical procedures to include thoracic, cranial vault procedures and vascular procedures. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and anesthesiologists. Credits: 4.00

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DACP 830: CLINICAL PRACTICUM IV

The fourth clinical practicum course is designed to assist the nurse anesthesia student to apply concepts from didactic coursework including focus on cardiovascular, thoracic, and vascular anesthesia. Advanced airway techniques and sophisticated laboratory analysis will be included. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and/or anesthesiologists **Credits:** 10.00

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DACP 830: CLINICAL PRACTICUM IV

The fourth clinical practicum course is designed to assist the nurse anesthesia student in applying concepts from didactic coursework to cardiovascular, thoracic, and vascular anesthesia. Advanced airway techniques and sophisticated laboratory analysis are included. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated and specialty cases and must meet or exceed level-specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and physician anesthesiologists.

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DACP 840: CLINICAL PRACTICUM V

This fifth clinical course is designed to assist the nurse anesthesia student to apply concepts from didactic coursework including focus on professional interpersonal relations becoming of a nurse anesthetist, while clinically focusing on case requirements required for neurosurgical, trauma, orthopedic, renal transplant and hepatic transplant anesthesia. Students will apply advanced principles of fluid and blood management and demonstrate the ability to treat perioperative hematologic disorders. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and/or anesthesiologists. Credits: 10.00

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DACP 850: CLINICAL PRACTICUM VI

This sixth clinical course is designed to assist the nurse anesthesia student to synthesize content from all advanced principles courses and to become increasingly independent in their clinical practice. Students should demonstrate the professional traits of a nurse anesthetist focusing on communication and proper interpersonal relationships conducive to all staff involved in an operative procedure. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and/or anesthesiologists. **Credits:** 10.00

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DACP 850: CLINICAL PRACTICUM VI

This sixth clinical course is designed to assist the nurse anesthesia student to synthesize content from all advanced principles courses and to become increasingly independent in their clinical practice. Students should demonstrate the professional traits of a nurse anesthetist focusing on communication and proper interpersonal relationships conducive to all staff involved in an operative procedure. Students will be assigned to affiliated clinical sites and anesthesia related specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed level specific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and/or anesthesiologists. Credits: 10.00

D30, D31, D32, D33, D34, D35, D36, D37, D38

2024

DACP 850: CLINICAL PRACTICUM VI

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DACP 860: CLINICAL PRACTICUM VII

This seventh clinical course is designed to assist the nurse anesthesia student to synthesize content from all advanced principles courses and to become increasingly independent in their clinical practice. Students should demonstrate the professional traits of a nurse anesthetist including communication and proper interpersonal relationships conducive to all staff involved in an operative procedure. Students are assigned to affiliate clinical sites and anesthesiarelated specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed levelspecific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and physician anesthesiologists. Credits: 7.00

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DACP 860: CLINICAL PRACTICUM VII

This seventh clinical course is designed to assist the nurse anesthesia student to synthesize content from all advanced principles courses and to become increasingly independent in their clinical practice. Students should demonstrate the professional traits of a nurse anesthetist including communication and proper interpersonal relationships conducive to all staff involved in an operative procedure. Students are assigned to affiliate clinical sites and anesthesiarelated specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed levelspecific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and physician anesthesiologists.

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DACP 860: CLINICAL PRACTICUM VII

This seventh clinical course is designed to assist the nurse anesthesia student to synthesize content from all advanced principles courses and to become increasingly independent in their clinical practice. Students should demonstrate the professional traits of a nurse anesthetist including communication and proper interpersonal relationships conducive to all staff involved in an operative procedure. Students are assigned to affiliate clinical sites and anesthesiarelated specialty areas. Students will be assigned to increasingly complicated and specialty cases and will be required to meet or exceed levelspecific objectives. Clinical experiences will be guided by certified registered nurse anesthetists and physician anesthesiologists. Credits: 7.00

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DACS 800-850: Simulation I-V

DACS 800: SIMULATION I

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

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This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 805: SIMULATION & CASE CONFERENCE I This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. Credits: 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 810: SIMULATION II

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 810: SIMULATION II

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 810: SIMULATION II

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 810: SIMULATION II

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 815: SIMULATION & CASE CONFERENCE II

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 820: SIMULATION III & CASE CONFERENCE

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 820: SIMULATION II & CASE CONFERENCE

This course provides one credit hour with separate grades given for each learning experience. Each simulation has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice hypotension and hypertension management for patients undergoing induction of general anesthesia, management of difficult airway anesthesia cases, and additional topics. Case conference provides student groups to debrief a challenging case from their first semester of clinical experience.

Credits: 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 820 : SIMULATION III & CASE CONFERENCE

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 830: SIMULATION IV

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 830: SIMULATION IV

This course spans four semesters, with one credit hour per course awarded and with separate grades given for each consecutive course. Each course has learning activities aligned to supplement classroom teachings and readings. Simulation is intended for students to practice and demonstrate basic, advanced skills, decision-making and critical thinking as they progress in their studies and clinical practice experiences. Students practice fiberoptic intubations, jet ventilation, advanced airway techniques for difficult airways, CVP placement, one lung ventilation, hypo and hypertension management, epidural and spinal placement, pediatric laryngospasm, ultrasound guided regional anesthesia, and management of vascular complications. **Credits:** 1.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, Objectives: D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D25, D26, D27, D28, D29, D30, D33, D34, D35, D36, D37, D38

DACS 840: SIMULATION V Credits: 1.00

DAHA 800: Advanced Health Assessment

DAHA 800: Advanced Health Assessment

This course provides a broad orientation to the basics, significance and strengths of the anesthesia focused perioperative evaluation and physical health assessment of the adult surgical patient. An introduction into patient point-of-care ultrasound (POCUS) assessment techniques will also be presented. Students will have the opportunity to practice POCUS and physical health assessment skills in a laboratory setting that will be accompanied by a competency assessment of each to show mastery of these concepts. **Credits:** 4.00

Learning D1, D4, D5, D6, D7, D8, D9, D13, D14, D15, Objectives: D16, D17, D19, D22, D25, D26, D27, D28

DAHA 800: Advanced Health Assessment

This course provides a broad orientation to the basics, significance and strengths of the anesthesia focused perioperative evaluation and physical health assessment of the adult surgical patient. An introduction into patient point-of-care ultrasound (POCUS) assessment techniques will also be presented.

Credits: 4.00 Learning D1, D4, D5, D6, D7, D8, D9, D13, D14, D15, Objectives: D16, D17, D19, D22, D25, D26, D27, D28

DAHA 800: Advanced Health Assessment

This course provides a broad orientation to the basics, significance and strengths of the anesthesia focused perioperative evaluation and physical health assessment of the adult surgical patient. An introduction into patient point-of-care ultrasound (POCUS) assessment techniques will also be presented.

Credits: 4.00 Learning D1, D2, D5, D6, D7, D8, D9, D13, D14, D15, Objectives: D17, D19, D23, D25, D26, D27, D28, D29, D30, D34, D35, D44, D48, D49

DAHA 800: Advanced Health Assessment

This course provides a comprehensive history and physical assessment, focusing on a thorough head-to-toe evaluation of all human body systems. It incorporates advanced assessment techniques, concepts, and clinical approaches to ensure students are well-prepared for clinical practice. In addition, students will develop proficiency in point-of-care ultrasound (POCUS), enabling them to combine physical examination findings with POCUS results for improved clinical decision-making, particularly in adult surgical patients. Through hands-on practice in a laboratory setting, students will have sufficient time to perform detailed assessments of each system and refine their POCUS techniques. At the end of the course. competency assessments will be conducted to ensure mastery of both physical health assessments and POCUS techniques. Credits: 4.00

Learning D1, D4, D5, D6, D7, D8, D9, D13, D14, D15, Objectives: D16, D17, D19, D22, D25, D26, D27, D28

DAPH 800-830: Pharmacology & Advanced Pharmacology Principles I-III

DAPH 800: Pharmacology for the Advanced Practice Nurse: Nurse Anesthetists

This course is designed to discuss concepts related to the advanced pharmacotherapeutics of frequently encountered and prescribed non-anesthesia specific medications at the cellular and systems levels. Many patients receiving anesthesia will be concurrently receiving medications from one or more of the categories discussed. In addition to medication indications, interactions, side effects, contraindications, and important patient education; the legal requirements and implications of being a safe and conscientious provider and prescriber will be integrated throughout the course.

Credits: 2.00

Learning D1, D4, D5, D6, D7, D13, D14, D16, D17, Objectives: D26, D34, D36, D37 Delivery Format: Online

DAPH 800: PHARMACOLOGY FOR THE Advanced Practice Nurse: Nurse Anesthetists

This course is designed to discuss concepts related to the advanced pharmacotherapeutics of frequently encountered and prescribed non-anesthesia specific medications at the cellular and systems levels. Many patients receiving anesthesia will be concurrently receiving medications from one or more of the categories discussed. In addition to medication indications, interactions, side effects, contraindications, and important patient education; the legal requirements and implications of being a safe and conscientious provider and prescriber will be integrated throughout the course.

Credits: 2.00

Learning D1, D4, D5, D6, D7, D13, D14, D16, D17, Objectives: D26, D34, D36, D37 Delivery Format: Online

DAPH 800: Pharmacology for the Advanced Practice Nurse: Nurse Anesthetists

This course is designed to discuss concepts related to the advanced pharmacotherapeutics of frequently encountered and prescribed nonanesthesia specific medications at the cellular and systems levels. Many patients receiving anesthesia will be concurrently receiving medications from one or more of the categories discussed. In addition to medication indications, interactions, side effects, contraindications, and important patient education; the legal requirements and implications of being a safe and conscientious provider and prescriber will be integrated throughout the course.

Credits: 2.00

Learning D1, D4, D5, D6, D7, D13, D14, D16, D17, Objectives: D26, D34, D36, D37 Delivery Format: Online

DAPH 800: PHARMACOLOGY FOR THE Advanced Practice Nurse: Nurse Anesthetists

This course is designed to discuss concepts related to the advanced pharmacotherapeutics of frequently encountered and prescribed nonanesthesia specific medications at the cellular and systems levels. Many patients receiving anesthesia will be concurrently receiving medications from one or more of the categories discussed. In addition to medication indications, interactions, side effects, contraindications, and important patient education; the legal requirements and implications of being a safe and conscientious provider and prescriber will be integrated throughout the course.

 Credits: 2.00

 Learning
 D1, D4, D5, D6, D7, D13, D14, D16, D17,

 Objectives:
 D26, D34, D36, D37

 Delivery Format: Online
 D10

DAPH 810: Advanced Pharmacology Principles I

In this course topics will include:& pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of commonly used anesthesia medications and discussed at the systemic, organ, and cellular levels. Other areas addressed when applicable are the influence of genetics and integration to the clinical setting.

Credits: 2.00 Learning Objectives:

D1, D4, D5, D6, D7, D9, D10, D11, D13, D14, D21, D22

DAPH 810: Advanced Pharmacology Principles I

In this course topics will include:& pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of commonly used anesthesia medications and discussed at the systemic, organ, and cellular levels. Other areas addressed when applicable are the influence of genetics and integration to the clinical setting. **Credits:** 2.00

Learning D1, D4, D5, D6, D7, D9, D10, D11, D13, Objectives: D14, D21, D22

DAPH 810: Advanced Pharmacology Principles I

In this course topics will include:& pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of commonly used anesthesia medications and discussed at the systemic, organ, and cellular levels. Other areas addressed when applicable are the influence of genetics and integration to the clinical setting.

Credits: 2.00 Learning D1, D4, D5 Objectives: D14, D21, I

D1, D4, D5, D6, D7, D9, D10, D11, D13, D14, D21, D22

DAPH 810: Advanced Pharmacology Principles I

In this course topics will include:& pharmacodynamics, pharmacokinetics, and pharmacotherapeutics of commonly used anesthesia medications and discussed at the systemic, organ, and cellular levels. Other areas addressed when applicable are the influence of genetics and integration to the clinical setting. **Credits:** 2.00

Learning D1, D4, D5, D6, D7, D9, D10, D11, D13, Objectives: D14, D21, D22

DAPH 820: Advanced Pharmacology Principles II

This course is designed to build upon basic knowledge of pharmacologic mechanisms of action, cardiothoracic physiology andvasoactive medications. The course covers pathophysiologic considerations in the cardiac patient, as well as an overview ofhemodynamic goals during anesthesia. In addition, clinical pharmacology of vasoactive drugs and their application during anesthesiais included. The course assists the student to build advanced knowledge in order to use a variety of current anesthetic techniques, agents, adjunctive drugs and equipment while providing anesthesia. Credits: 2.00

Learning D1, D4, D5, D7, D13, D14, D15, D19, D21, Objectives: D22, D23

DAPH 820: Advanced Pharmacology Principles II

This course is designed to build upon basic knowledge of pharmacologic mechanisms of action, cardiothoracic physiology andvasoactive medications. The course covers pathophysiologic considerations in the cardiac patient, as well as an overview ofhemodynamic goals during anesthesia. In addition, clinical pharmacology of vasoactive drugs and their application during anesthesiais included. The course assists the student to build advanced knowledge in order to use a variety of current anesthetic techniques, agents, adjunctive drugs and equipment while providing anesthesia. **Credits:** 2,00

Learning D1, D4, D5, D7, D13, D14, D15, D19, D21, Djectives: D22, D23

DAPH 820: Advanced Pharmacology Principles II

This course is designed to build upon basic knowledge of pharmacologic mechanisms of action, cardiothoracic physiology and vasoactive medications. The course covers pathophysiologic considerations in the cardiac patient and an overview of hemodynamic goals during anesthesia. In addition, clinical pharmacology of vasoactive drugs and their application during anesthesia is included. The course assists the student to build advanced knowledge in order to use a variety of current anesthetic techniques, agents, adjunctive drugs and equipment while providing anesthesia. Credits: 2.00

Learning D1, D4, D5, D7, D13, D14, D15, D19, D21, Djectives: D22, D23

DAPH 820 : Advanced Pharmacology Principles II

This course is designed to build upon basic knowledge of pharmacologic mechanisms of action, cardiothoracic physiology and vasoactive medications. The course covers pathophysiologic considerations in the cardiac patient and an overview of hemodynamic goals during anesthesia. In addition, clinical pharmacology of vasoactive drugs and their application during anesthesia is included. The course assists the student to build advanced knowledge in order to use a variety of current anesthetic techniques, agents, adjunctive drugs and equipment while providing anesthesia.

Credits: 2.00

Learning D1, D4, D5, D7, D13, D14, D15, D19, D21, D22, D23

DAPH 830: Advanced Pharmacology Principles III

This course is designed to build upon DAPH 810 and 820. DAPH 830 assists the student to build advanced knowledge for safe and appropriate use of a variety of current anesthetic and pharmacologic techniques, agents, and adjuncts while providing anesthesia. Content from DAPH 810, 820 and the 2023 Drug List may be incorporated in DAPH 830. Credits: 2,00

Learning D1, D4, D5, D6, D7, D9, D10, D13, D14, D15, Objectives: D16, D19, D20, D21, D22, D23, D37, D44, D46, D47

DAPH 830: Advanced Pharmacology Principles III

This course is designed to build upon DAPH 810 and 820. DAPH 830 assists the student to build advanced knowledge for safe and appropriate use of a variety of current anesthetic and pharmacologic techniques, agents, and adjuncts while providing anesthesia. Content from DAPH 810, 820 and the 2023 Drug List may be incorporated in DAPH 830. Credits: 2.00

Learning D1, D4, D5, D6, D7, D9, D10, D13, D14, D15, Objectives: D16, D19, D20, D21, D22, D23, D37, D44, D46, D47

DAPH 830: Advanced Pharmacology Principles III

This course is designed to build upon DAPH 810 and 820. DAPH 830 assists the student to build advanced knowledge for safe and appropriate use of a variety of current anesthetic and pharmacologic techniques, agents, and adjuncts while providing anesthesia. Content from DAPH 810, 820 and the 2023 Drug List may be incorporated in DAPH 830. **Credits:** 2.00

Learning D1, D4, D5, D6, D7, D9, D10, D13, D14, D15, Objectives: D16, D19, D20, D21, D22, D23, D37, D44, D46, D47

DAPH 830: Advanced Pharmacology Principles III

This course is designed to build upon DAPH 810 and 820. DAPH 830 assists the student to build advanced knowledge for safe and appropriate use of a variety of current anesthetic and pharmacologic techniques, agents, and adjuncts while providing anesthesia. Content from DAPH 810, 820 and the 2023 Drug List may be incorporated in DAPH 830. Credits: 2.00

Learning D1, D4, D5, D6, D7, D9, D10, D13, D14, D15, Objectives: D16, D19, D20, D21, D22, D23, D37, D44, D46, D47

DAPP 800-830: Anatomy, Physiology & Pathophysiology I-III

DAPP 800: Anatomy, Physiology & Pathophysiology

This course focuses on concepts foundational to an understanding of human physiology. Functional systems of the cell, cell metabolism, cell membrane transport, membrane potentials, action potentials, cell receptors, cell markers, the cardiovascular system, respiratory physiology, the renal system, muscle physiology, and the hematopoietic system will be covered. Selected pathophysiologic and anesthesia-related examples are integrated. Understanding these concepts is a prerequisite to a comprehension of all cell, tissue, organ, and systems physiology and pathophysiology. This content serves as a basis for everything else we will discuss during the second and third semesters. **Credits:** 3.00

Learning Objectives: D13, D14, D21, D23

DAPP 800: Anatomy, Physiology & Pathophysiology

This course focuses on concepts foundational to an understanding of human physiology. Functional systems of the cell, cell metabolism, cell membrane transport, membrane potentials, action potentials, cell receptors, cell markers, the cardiovascular system, respiratory physiology, the renal system, muscle physiology, and the hematopoietic system will be covered. Selected pathophysiologic and anesthesia-related examples are integrated. Understanding these concepts is a prerequisite to a comprehension of all cell, tissue, organ, and systems physiology and pathophysiology. This content serves as a basis for everything else we will discuss during the second and third semesters. **Credits:** 3.00

Learning Objectives: D13

DAPP 800: Anatomy, Physiology & Pathophysiology

This course focuses on concepts foundational to an understanding of human physiology. Functional systems of the cell, cell metabolism, cell membrane transport, membrane potentials, action potentials, cell receptors, cell markers, the cardiovascular system, respiratory physiology, the renal system, muscle physiology, and the hematopoietic system will be covered. Selected pathophysiologic and anesthesia-related examples are integrated. Understanding these concepts is a prerequisite to a comprehension of all cell, tissue, organ, and systems physiology and pathophysiology. This content serves as a basis for everything else we will discuss during the second and third semesters. **Credits:** 3.00

Learning Objectives: D13, D14, D21, D23

DAPP 800: Advanced Physiology & Pathophysiology I

This course focuses on concepts foundational to an understanding of human physiology and general principles across the lifespan. Functional systems of the cell, cell metabolism, cell membrane transport, membrane potentials, action potentials, cell receptors, cell markers, the cardiovascular system, respiratory physiology, the renal system, muscle physiology, and the hematopoietic system will be covered. Selected pathophysiologic and anesthesiarelated examples are integrated. Understanding these concepts is a prerequisite to a comprehension of all cell, tissue, organ, and systems physiology and pathophysiology. This content serves foundation for Advanced Physiology and Pathophysiology II and III. Credits: 3.00 Learning Objectives: D13, D14, D21, D23

DAPP 810: Advanced Anatomy, Physiology & Pathophysiology I

This course is designed to discuss concepts related to anatomy and physiology of the nervous system, including the vertebral column, spinal cord, cranial nerves; the autonomic nervous system, the endocrine system, the immune system, and liver physiology. Selected pathophysiologic and anesthesia-related examples are integrated. Credits: 3.00 Learning Objectives: D13

DAPP 810: Advanced Anatomy, Physiology & Pathophysiology I

This course is designed to discuss concepts related to anatomy and physiology of the nervous system, including the vertebral column, spinal cord, cranial nerves; the autonomic nervous system, the endocrine system, the immune system, and liver physiology. Selected pathophysiologic and anesthesia-related examples are integrated. Credits: 3.00

Learning Objectives: D13

DAPP 810: Advanced Anatomy, Physiology & Pathophysiology I

This course is designed to discuss concepts related to anatomy and physiology of the nervous system, including the vertebral column, spinal cord, cranial nerves; the autonomic nervous system, the endocrine system, the immune system, and liver physiology. Selected pathophysiologic and anesthesia-related examples are integrated. Credits: 3.00 Learning Objectives: D13

DAPP 820: Advanced Anatomy, Physiology & Pathophysiology II

This course focuses on concepts related to inflammation-immunity; physiology of the renal system; acid-base balance; integrated mechanisms of blood pressure regulation; and the endocrine system. Selected pathophysiologic and anesthesia examples are integrated. Credits: 3.00

Learning Objectives: D13, D14, D21, D23

DAPP 820: Advanced Anatomy, Physiology & Pathophysiology II

This course focuses on concepts related to inflammation-immunity; physiology of the renal system; acid-base balance; integrated mechanisms of blood pressure regulation; and the endocrine system. Selected pathophysiologic and anesthesia examples are integrated. Credits: 3.00 Learning Objectives: D13

DAPP 820: Advanced Anatomy, Physiology & Pathophysiology II

This course focuses on concepts related to inflammation-immunity; physiology of the renal system; acid-base balance; integrated mechanisms of blood pressure regulation; and the endocrine system. Selected pathophysiologic and anesthesia examples are integrated. Credits: 3.00

Learning Objectives: D13, D14, D21, D23

DAPP 820: Advanced Anatomy, Physiology & Pathophysiology II

This course focuses on concepts related to inflammation-immunity; physiology of the renal system; acid-base balance; integrated mechanisms of blood pressure regulation; and the endocrine system. Selected pathophysiologic and anesthesia examples are integrated. Credits: 3.00

Learning Objectives: D13, D14, D21, D23

DAPP 830: ADVANCED TOPICS IN PATHOPHYSIOLOGY

This course engages the student in advanced clinically oriented topics that focus on advanced principles of management and techniques in the delivery of anesthesia. These concepts and principles are applied to patient situations in which the patient has a complex, or an unusual presentation. Special emphasis is placed on the anatomy, physiology, and pathophysiology topics found in the Basic Sciences section of the National Certification Examination.

Credits: 2.00

Learning D1, D4, D5, D6, D7, D8, D9, D10, D13, D14, Objectives: D16, D17, D18, D19, D21, D22, D23, D26

DAPP 830: ADVANCED TOPICS IN PATHOPHYSIOLOGY

This course engages the student in advanced clinically oriented topics that focus on advanced principles of management and techniques in the delivery of anesthesia. These concepts and principles are applied to patient situations in which the patient has a complex, or an unusual presentation. Special emphasis is placed on the anatomy, physiology, and pathophysiology topics found in the Basic Sciences section of the National Certification Examination.

Credits: 2.00

Learning Objectives: D4, D9, D10, D13, D16, D17, D19, D21, D22, D26

DAPP 830: Advanced Topics in PATHOPHYSIOLOGY

This course engages the student in advanced clinically oriented topics that focus on advanced principles of management and techniques in the delivery of anesthesia. These concepts and principles are applied to patient situations in which the patient has a complex, or an unusual presentation. Special emphasis is placed on the anatomy, physiology, and pathophysiology topics found in the Basic Sciences section of the National Certification Examination.

Credits: 2.00 Learning

D4, D9, D10, D13, D16, D17, D19, D21, Objectives: D22, D26

DAPP 830 : Advanced Topics in PATHOPHYSIOLOGY

This course engages the student in advanced clinically oriented topics that focus on advanced principles of management and techniques in the delivery of anesthesia. These concepts and principles are applied to patient situations in which the patient has a complex, or an unusual presentation. Special emphasis is placed on the anatomy, physiology, and pathophysiology topics found in the Basic Sciences section of the National Certification Examination.

Credits: 2.00

D4, D9, D10, D13, D16, D17, D19, D21, Learning **Objectives:** D22, D26

DBAP 800-810: BASIC AND Advanced Principles of ANESTHESIA I-III

DBAP 800: BASIC PRINCIPLES OF ANESTHESIA I

This course provides a broad orientation to the basic principles of anesthesia practice and the perioperative setting. The focus of the course includes: basics of anesthesia delivery systems, machines, airway equipment, monitoring devices, anesthetic techniques, fluid/volume assessment and management, patient positioning, basic/difficult airway management, acute/ chronic pain management and basic clinical dosage calculations. This course spans one semester and is three credit hours of credit. Credits: 3.00

D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Learning Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 800: BASIC PRINCIPLES OF ANESTHESIA I This course provides a broad orientation to the basic principles of anesthesia practice and the perioperative setting. The focus of the course includes: basics of anesthesia delivery systems, machines, airway equipment, monitoring devices, preoperative patient assessment, anesthetic techniques, fluid/volume assessment and management, patient positioning, basic/difficult airway management, local/regional anesthetics, and acute/chronic pain management. This course spans one semester and is three credit hours of credit.

Credits: 3.00

D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Learning Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 800: BASIC PRINCIPLES OF NURSE Anesthesia I

This course provides a broad orientation to the basic principles of anesthesia practice and the perioperative setting. The focus of the course includes: basics of anesthesia delivery systems, machines, airway equipment, monitoring devices, anesthetic techniques, fluid/volume assessment and management, patient positioning, basic/ difficult airway management, acute/chronic pain management and basic clinical dosage calculations. The course will also include patient positioning simulation experiences. Credits: 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D21, D22, D6, D8, D11, D12, D15, D17, D25, D26, D27, D28, D29, D32, D33, D34, D35, D36, D37, D49, D50

DBAP 800 : BASIC PRINCIPLES OF ANESTHESIA I This course provides a broad orientation to the basic principles of anesthesia practice and the perioperative setting. The focus of the course includes: basics of anesthesia delivery systems, machines, airway equipment, monitoring devices, preoperative patient assessment, anesthetic techniques, fluid/volume assessment and management, patient positioning, basic/difficult airway management, local/regional anesthetics, and acute/chronic pain management. This course spans one semester and is three credit hours of credit.

Credits: 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 805: BASIC PRINCIPLES OF ANESTHESIA II This course expands on the foundation established in the Principles of Anesthesia I course. The goal will be to explore more advanced principles of anesthesia practice in the perioperative setting and responsibilities of the anesthesia provider. Focus of the course includes: intrabdominal laparoscopic/open procedures, ear/ nose/neck and throat, orthopedic and pelvic procedures along with an additional exploration of special considerations for geriatric and obese patient subpopulations. This course prepares the learner for practice in the clinical setting through exploration of individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit.

Credits: 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 805: BASIC PRINCIPLES OF ANESTHESIA II

This course expands on the foundation established in the Principles of Anesthesia I course. The goal will be to explore more advanced principles of anesthesia practice in the perioperative setting and responsibilities of the anesthesia provider. Focus of the course includes: intrabdominal laparoscopic/open procedures, ear/ nose/neck and throat, orthopedic and pelvic procedures along with an additional exploration of special considerations for geriatric and obese patient subpopulations. This course prepares the learner for practice in the clinical setting through exploration of individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit. **Credits:** 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 805: BASIC PRINCIPLES OF ANESTHESIA II This course expands on the foundation established in the Principles of Anesthesia I course. The goal will be to explore more advanced principles of anesthesia practice in the perioperative setting and responsibilities of the anesthesia provider. Focus of the course includes: intrabdominal laparoscopic/open procedures, ear/ nose/neck and throat, orthopedic and pelvic procedures along with an additional exploration of special considerations for geriatric and obese patient subpopulations. This course prepares the learner for practice in the clinical setting through exploration of individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit. **Credits:** 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 805: BASIC PRINCIPLES OF ANESTHESIA II This course expands on the foundation established in the Principles of Anesthesia I course. The goal will be to explore more advanced principles of anesthesia practice in the perioperative setting and responsibilities of the anesthesia provider. Focus of the course includes: intrabdominal laparoscopic/open procedures, ear/ nose/neck and throat, orthopedic and pelvic procedures along with an additional exploration of special considerations for geriatric and obese patient subpopulations. This course prepares the learner for practice in the clinical setting through exploration of individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit. Credits: 3.00

Learning D1, D2, D3, D4, D5, D7, D9, D10, D13, D14, Objectives: D16, D18, D19, D20, D21, D22, D23

DBAP 810: Advanced Principles in Nurse Anesthesia III

This course is a continuation of the concepts covered in Principles of Anesthesia I/II. The focus will be on more advanced principles of anesthesia practice in the perioperative setting, and provider responsibilities will be expanded to include more complex and challenging surgical procedures. Topics covered in the course include: intracranial, neuroskeletal, vascular, thoracic, cardiac, organ transplantation, trauma and burn anesthesia. This course prepares the learner for practice in the clinical setting through exploration of complex individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit.

Credits: 3.00

Learning D1, D4, D5, D6, D7, D8, D9, D10, D13, D14, Objectives: D18, D19, D20, D21, D22, D23

DBAP 810: Advanced Principles in Nurse Anesthesia III

This course is a continuation of the concepts covered in Principles of Anesthesia I/II. The focus will be on more advanced principles of anesthesia practice in the perioperative setting, and provider responsibilities will be expanded to include more complex and challenging surgical procedures. Topics covered in the course include: intracranial, neuroskeletal, vascular, thoracic, cardiac, organ transplantation, trauma and burn anesthesia. This course prepares the learner for practice in the clinical setting through exploration of complex individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit.

Credits: 3.00

Learning D1, D4, D5, D6, D7, D8, D9, D10, D13, D14, Objectives: D18, D19, D20, D21, D22, D23

DBAP 810: Advanced Principles in Nurse Anesthesia III

This course is a continuation of the concepts covered in Principles of Anesthesia I/II. The focus will be on more advanced principles of anesthesia practice in the perioperative setting, and provider responsibilities will be expanded to include more complex and challenging surgical procedures. Topics covered in the course include: intracranial, neuroskeletal, vascular, thoracic, cardiac, organ transplantation, trauma and burn anesthesia. This course prepares the learner for practice in the clinical setting through exploration of complex individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit. **Credits:** 3.00

Learning D1, D4, D5, D6, D7, D8, D9, D10, D13, D14, Objectives: D18, D19, D20, D21, D22, D23

DBAP 810 : Advanced Principles in Nurse Anesthesia III

This course is a continuation of the concepts covered in Principles of Anesthesia I/II. The focus will be on more advanced principles of anesthesia practice in the perioperative setting, and provider responsibilities will be expanded to include more complex and challenging surgical procedures. Topics covered in the course include: intracranial, neuroskeletal, vascular, thoracic, cardiac, organ transplantation, trauma and burn anesthesia. This course prepares the learner for practice in the clinical setting through exploration of complex individual adult surgical procedures and anesthesia plans of care. This course spans one semester and is three credit hours of credit. **Credits:** 3.00

Learning D1, D4, D5, D6, D7, D8, D9, D10, D13, D14, Objectives: D18, D19, D20, D21, D22, D23

DBAP 820-840: Advanced Physiology and Pathophysiology Courses

DBAP 820: Advanced Physiology &

PATHOPHYSIOLOGY: REGIONAL ANESTHESIA An introduction to regional anesthesia techniques commonly used in the management pain during the perioperative period with a comprehensive review of the anatomy and physiology related to each procedure through didactic lecture, hands-on simulation lab, and cadaveric education. Pharmacologic implications specific to regional anesthesia its applications are investigated. This course also describes the neurophysiologic implications of acute and chronic pain and the management principles for each. **Credits:** 5.00

Learning D1, D2, D3, D4, D5, D7, D8, D11, D13, D14, Objectives: D15, D16, D17, D18, D19, D20, D21, D22, D23, D29, D30, D44 DBAP 820: ADVANCED PHYSIOLOGY & PATHOPHYSIOLOGY: REGIONAL ANESTHESIA An introduction to regional anesthesia techniques commonly used in the management pain during the perioperative period with a comprehensive review of the anatomy and physiology related to each procedure through didactic lecture, handson simulation lab, and cadaveric education. Pharmacologic implications specific to regional anesthesia its applications are investigated. This course also describes the neurophysiologic implications of acute and chronic pain and the management principles for each.

Credits: 5.00

Learning D1, D2, D3, D4, D5, D7, D8, D11, D13, D14, Objectives: D15, D16, D17, D18, D19, D20, D21, D22, D23, D29, D30, D44

DBAP 820: ADVANCED PHYSIOLOGY & PATHOPHYSIOLOGY: REGIONAL ANESTHESIA An introduction to regional anesthesia techniques commonly used in the management pain during the perioperative period with a comprehensive review of the anatomy and physiology related to each procedure through didactic lecture, handson simulation lab, and cadaveric education. Pharmacologic implications specific to regional anesthesia its applications are investigated. This course also describes the neurophysiologic implications of acute and chronic pain and the management

principles for each.

Credits: 5.00

Learning D1, D2, D3, D4, D5, D7, D8, D11, D13, D14, Objectives: D15, D16, D17, D18, D19, D20, D21, D22, D23, D29, D30, D44

DBAP 820: ADVANCED PHYSIOLOGY & PATHOPHYSIOLOGY: REGIONAL ANESTHESIA An introduction to regional anesthesia techniques commonly used in the management pain during the perioperative period with a comprehensive review of the anatomy and physiology related to each procedure through didactic lecture, handson simulation lab, and cadaveric education. Pharmacologic implications specific to regional anesthesia its applications are investigated. This course also describes the neurophysiologic implications of acute and chronic pain and the management principles for each. Credits: 5.00

Learning D1, D2, D3, D4, D5, D7, D8, D11, D13, D14, Objectives: D15, D16, D17, D18, D19, D20, D21, D22, D23, D29, D30, D44

DBAP 830: ADVANCED PHYSIOLOGY &

PATHOPHYSIOLOGY: OBSTETRICS ANESTHESIA An in-depth review of practicing anesthesia in specialized areas of nurse anesthesia practice in obstetrics, geriatrics, and the obese patient. The student will receive special emphasis on physiology, pathophysiology, and pharmacology in each area of sub-specialization. Current evidence-based techniques and best practices related to safe management of all patients will be presented. Credits: 2.00

Learning Objectives: D13, D15, D16, D17, D19, D21, D22

DBAP 830: Advanced Physiology & Pathophysiology: Obstetrics Anesthesia

An in-depth review of practicing anesthesia in specialized areas of nurse anesthesia practice in obstetrics, geriatrics, and the obese patient. The student will receive special emphasis on physiology, pathophysiology, and pharmacology in each area of sub-specialization. Current evidence-based techniques and best practices related to safe management of all patients will be presented. **Credits:** 2.00

Learning Objectives: D13, D15, D16, D17, D19, D21, D22

DBAP 830: Advanced Physiology & Pathophysiology: Obstetrics Anesthesia

An in-depth review of practicing anesthesia in specialized areas of nurse anesthesia practice in obstetrics, geriatrics, and the obese patient. The student will receive special emphasis on physiology, pathophysiology, and pharmacology in each area of sub-specialization. Current evidence-based techniques and best practices related to safe management of all patients will be presented. **Credits:** 2.00

Learning Objectives: D13, D15, D16, D17, D19, D21, D22

DBAP 830: Advanced Physiology & Pathophysiology: Obstetrics Anesthesia

An in-depth review of practicing anesthesia in specialized areas of nurse anesthesia practice in obstetrics, geriatrics, and the obese patient. The student will receive special emphasis on physiology, pathophysiology, and pharmacology in each area of sub-specialization. Current evidence-based techniques and best practices related to safe management of all patients will be presented.

Credits: 2.00

Learning Objectives: D13, D15, D16, D17, D19, D21, D22

DBAP 840: Advanced Physiology &

PATHOPHYSIOLOGY: PEDIATRIC ANESTHESIA This course introduces the basic and advanced concepts and techniques necessary for the provision of safe anesthesia in the OR/ procedure rooms for neonates, infants, children, and adolescents. Special consideration is given to mental and physical developmental benchmarks for this age group. Lectures will include specific aspects of pediatric airway management, anatomy & physiology, congenital heart disease, pharmacology, most common pediatric syndromes, caudal (regional) anesthesia, treatment of pediatric trauma and abuse. Creditor 2 00

Credits: 3.00

Learning D1, D3, D4, D5, D7, D8, D9, D10, D11, D13, Objectives: D14, D15, D16, D17, D18, D21, D25, D26, D27, D28, D29, D30, D31, D35, D36, D37

DBAP 840: ADVANCED PHYSIOLOGY &

PATHOPHYSIOLOGY: PEDIATRIC ANESTHESIA This course introduces the basic and advanced concepts and techniques necessary for the provision of safe anesthesia in the OR/ procedure rooms for neonates, infants, children, and adolescents. Special consideration is given to mental and physical developmental benchmarks for this age group. Lectures will include specific aspects of pediatric airway management, anatomy & physiology, congenital heart disease, pharmacology, most common pediatric syndromes, caudal (regional) anesthesia, treatment of pediatric trauma and abuse. Credits: 3.00

Learning D1, D3, D4, D5, D7, D8, D9, D10, D11, D13, Objectives: D14, D15, D16, D17, D18, D21, D25, D26, D27, D28, D29, D30, D31, D35, D36, D37

DBAP 840: Advanced Physiology &

PATHOPHYSIOLOGY: PEDIATRIC ANESTHESIA This course introduces the basic and advanced concepts and techniques necessary for the provision of safe anesthesia in the OR/ procedure rooms for neonates, infants, children, and adolescents. Special consideration is given to mental and physical developmental benchmarks for this age group. Lectures will include specific aspects of pediatric airway management, anatomy & physiology, congenital heart disease, pharmacology, most common pediatric syndromes, caudal (regional) anesthesia, treatment of pediatric trauma and abuse. Credits: 3.00

Learning D1, D3, D4, D5, D7, D8, D9, D10, D11, D13, Objectives: D14, D15, D16, D17, D18, D21, D25, D26, D27, D28, D29, D30, D31, D35, D36, D37

DBAP 840: ADVANCED PHYSIOLOGY &

PATHOPHYSIOLOGY: PEDIATRIC ANESTHESIA This course introduces the basic and advanced concepts and techniques necessary for the provision of safe anesthesia in the OR/ procedure rooms for neonates, infants, children, and adolescents. Special consideration is given to mental and physical developmental benchmarks for this age group. Lectures will include specific aspects of pediatric airway management, anatomy & physiology, congenital heart disease, pharmacology, most common pediatric syndromes, caudal (regional) anesthesia, treatment of pediatric trauma and abuse. Credits: 3.00

Learning D1, D3, D4, D5, D7, D8, D9, D10, D11, D13, Objectives: D14, D15, D16, D17, D18, D21, D25, D26, D27, D28, D29, D30, D31, D35, D36, D37

DBAP 850: Advanced Physiology & Pathophysiology: Cardiac and Respiratory Anesthesia

This course presents anesthesia considerations for patients with a variety of cardiac lesions, including coronary artery disease, valve disease, hypertrophic cardiomyopathy, congenital cardiac disease and different forms of cardiomyopathy. Anesthesia techniques specifically tailored to meet the unique needs of each lesion are discussed, and monitoring strategies are considered. Surgical concerns for coronary artery bypass, valve repair/replacement, cardiac transplantation and non-cardiac surgery issues are covered. Vascular surgery in relationship to cardiac disease is reviewed, as well as many uncommon cardiac diseases.

Credits: 2.00

Learning D1, D3, D4, D5, D8, D9, D13, D14, D16, D17, Objectives: D18, D19, D21, D22, D23, D25, D26, D29, D32, D35, D36, D37

DBAP 850: Advanced Physiology & Pathophysiology: Cardiac and Respiratory Anesthesia

This course explains and discusses pathophysiologic considerations in the respiratory patient with a variety of diseases, including asthma, COPD, pulmonary hypertension, pulmonary embolism, obstructive sleep apnea and restrictive lung diseases. These concepts are incorporated into clinical application by discussion of specific pathologic states, assessment of pulmonary function and anesthetic risk and optimization during the conduct of anesthesia. The course covers pathophysiologic considerations in the cardiac patient with a variety of diseases including hypertension, pericardial disease, valvular disease, and different cardiomyopathies. Anesthesia techniques meeting the unique needs of each disease are discussed, and monitoring strategies are considered. The course includes a double-lumen tube simulation experience that covers one and two-lung pulmonary mechanics, control of ventilation, shunt and trouble-shooting techniques.

Credits: 2.00

Learning D1, D3, D4, D5, D8, D9, D13, D14, D16, D17, Objectives: D18, D19, D21, D22, D23, D25, D26, D29, D32, D35, D36, D37

DBAP 850: Advanced Physiology & Pathophysiology: Cardiac and Respiratory Anesthesia

This course explains and discusses pathophysiologic considerations in the respiratory patient with a variety of diseases. including asthma, COPD, pulmonary hypertension, pulmonary embolism, obstructive sleep apnea and restrictive lung diseases. These concepts are incorporated into clinical application by discussion of specific pathologic states, assessment of pulmonary function and anesthetic risk and optimization during the conduct of anesthesia. The course covers pathophysiologic considerations in the cardiac patient with a variety of diseases including hypertension, pericardial disease, valvular disease, and different cardiomyopathies. Anesthesia techniques meeting the unique needs of each disease are discussed, and monitoring strategies are considered. The course includes a double-lumen tube simulation experience that covers one and two-lung pulmonary mechanics, control of ventilation, shunt and trouble-shooting techniques.

Credits: 2.00

Learning D1, D3, D4, D5, D8, D9, D13, D14, D16, D17, Objectives: D18, D19, D21, D22, D23, D25, D26, D29, D32, D35, D36, D37

DBAP 850: Advanced Physiology & Pathophysiology: Cardiac and Respiratory Anesthesia

This course explains and discusses pathophysiologic considerations in the respiratory patient with a variety of diseases, including asthma, COPD, pulmonary hypertension, pulmonary embolism, obstructive sleep apnea and restrictive lung diseases. These concepts are incorporated into clinical application by discussion of specific pathologic states, assessment of pulmonary function and anesthetic risk and optimization during the conduct of anesthesia. The course covers pathophysiologic considerations in the cardiac patient with a variety of diseases including hypertension, pericardial disease, valvular disease, and different cardiomyopathies. Anesthesia techniques meeting the unique needs of each disease are discussed, and monitoring strategies are considered. The course includes a double-lumen tube simulation experience that covers one and two-lung pulmonary mechanics, control of ventilation, shunt and trouble-shooting techniques.

Credits: 2.00

Learning D1, D3, D4, D5, D8, D9, D13, D14, D16, D17, Objectives: D18, D19, D21, D22, D23, D25, D26, D29, D32, D35, D36, D37

DEBP 810-830: Evidence-Based Practice I-IV

DEBP 810: EVIDENCE-BASED PRACTICE I

This course is designed to introduce the purpose and components of the evidence-based process (EBP). Doctoral learners will gain a thorough understanding of EBP, with emphasis on the first three steps: (0) cultivate a spirit of inquiry, (1) formulate a compelling clinical PICOT question, and (2) search for the best evidence. Students will learn to embrace questioning attitudes and expected levels of uncertainty, as they explore clinical issues to determine problems relevant to anesthesiology. Knowledge and application of the EBP practice paradigm will be learned through reading, classroom lecture, applied technology and informatics, group discussion, skills practice, complex analysis, and peer feedback. Attained knowledge will be evidenced by development of PICOT format questions, evidence searches with reference lists, concept analyses, and digital poster projects. Credits: 2.00

Learning D23, D26, D27, D30, D31, D32, D33, D34, Objectives: D35, D37, D38, D40, D44, D45, D46, D47, D48, D49, D50

DEBP 810: EVIDENCE-BASED PRACTICE I

This course is designed to introduce the purpose and components of the evidence-based process (EBP). Doctoral learners will gain a thorough understanding of EBP, with emphasis on the first three steps: (0) cultivate a spirit of inquiry, (1) formulate a compelling clinical PICOT question, and (2) search for the best evidence. Students will learn to embrace questioning attitudes and expected levels of uncertainty, as they explore clinical issues to determine problems relevant to anesthesiology. Knowledge and application of the EBP practice paradigm will be learned through reading, classroom lecture, applied technology and informatics, group discussion, skills practice, complex analysis, and peer feedback. Attained knowledge will be evidenced by development of PICOT format questions, evidence searches with reference lists, concept analyses, and digital poster projects. Credits: 2.00

Learning D23, D26, D27, D30, D31, D32, D33, D34, Objectives: D35, D37, D38, D40, D44, D45, D46, D47, D48, D49, D50

DEBP 810: EVIDENCE-BASED PRACTICE I

This course is designed to introduce the purpose and components of the evidence-based process (EBP). Doctoral learners will gain a thorough understanding of EBP, with emphasis on the first three steps: (0) cultivate a spirit of inquiry, (1) formulate a compelling clinical PICOT question, and (2) search for the best evidence. Students will learn to embrace questioning attitudes and expected levels of uncertainty, as they explore clinical issues to determine problems relevant to anesthesiology. Knowledge and application of the EBP practice paradigm will be learned through reading, classroom lecture, applied technology and informatics, group discussion, skills practice, complex analysis, and peer feedback. Attained knowledge will be evidenced by development of PICOT format questions, evidence searches with reference lists, concept analyses, and digital poster projects. Credits: 2.00

Learning D23, D26, D27, D30, D31, D32, D33, D34, Objectives: D35, D37, D38, D40, D44, D45, D46, D47, D48, D49, D50

DEBP 810: EVIDENCE-BASED PRACTICE I

This course is designed to introduce the purpose and components of the evidence-based process (EBP). Doctoral learners will gain a thorough understanding of EBP, with emphasis on the first three steps: (0) cultivate a spirit of inquiry, (1) formulate a compelling clinical PICOT question, and (2) search for the best evidence. Students will learn to embrace questioning attitudes and expected levels of uncertainty, as they explore clinical issues to determine problems relevant to anesthesiology. Knowledge and application of the EBP practice paradigm will be learned through reading, classroom lecture, applied technology and informatics, group discussion, skills practice, complex analysis, and peer feedback. Attained knowledge will be evidenced by development of PICOT format questions, evidence searches with reference lists, concept analyses, and digital poster projects. Credits: 2.00

Learning D23, D26, D27, D30, D31, D32, D33, D34, Objectives: D35, D37, D38, D40, D44, D45, D46, D47, D48, D49, D50

DEBP 820: EVIDENCE-BASED PRACTICE II

This course is designed to build upon DEBP 810 and further develop an understanding of the evidencebased process. DEBP 820 will include (2) searching for the best evidence, (3) critical appraisal of the evidence, and (4) integration of the evidence with clinical expertise. Through careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, examine human subject research and the IRB process, complete a literature review, critically appraise and synthesize the evidence, develop an evidence-based recommendation, and create a doctoral project proposal.

A study of critical analysis and utilization of research evidence to improve health care outcomes, advance the nurse anesthesia profession, and affect health care policy is the focus. Emphasis is on the translation of research knowledge into practice through planned change processes and includes an in-depth study of the steps involved in implementing evidence-based practice. Activities are designed to facilitate development of the DNAP project. **Credits:** 2.00

Learning D13, D14, D23, D26, D27, D30, D33, D34, Objectives: D35, D36, D37, D44, D45, D46, D47, D48

DEBP 820: EVIDENCE-BASED PRACTICE II

This course is designed to build upon DEBP 810 and further develop an understanding of the evidence-based process. DEBP 820 will include (2) searching for the best evidence, (3) critical appraisal of the evidence, and (4) integration of the evidence with clinical expertise. Through careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, examine human subject research and the IRB process, complete a literature review, critically appraise and synthesize the evidence, develop an evidence-based recommendation, and create a doctoral project proposal.

A study of critical analysis and utilization of research evidence to improve health care outcomes, advance the nurse anesthesia profession, and affect health care policy is the focus. Emphasis is on the translation of research knowledge into practice through planned change processes and includes an in-depth study of the steps involved in implementing evidence-based practice. Activities are designed to facilitate development of the DNAP project. Credits: 2.00

Learning D13, D14, D23, D26, D27, D30, D33, D34, Objectives: D35, D36, D37, D44, D45, D46, D47, D48

DEBP 820: EVIDENCE-BASED PRACTICE II This course is designed to build upon DEBP 810 and further develop an understanding of the evidence-based process. DEBP 820 will include (2) searching for the best evidence, (3) critical appraisal of the evidence, and (4) integration of the evidence with clinical expertise. Through careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, examine human subject research and the IRB process, complete a literature review, critically appraise and synthesize the evidence, develop an evidence-based recommendation, and create a doctoral project proposal.

A study of critical analysis and utilization of research evidence to improve health care outcomes, advance the nurse anesthesia profession, and affect health care policy is the focus. Emphasis is on the translation of research knowledge into practice through planned change processes and includes an in-depth study of the steps involved in implementing evidence-based practice. Activities are designed to facilitate development of the DNAP project. Credits: 2.00

Learning D13, D14, D23, D26, D27, D30, D33, D34, Objectives: D35, D36, D37, D44, D45, D46, D47, D48

DEBP 820 : EVIDENCE-BASED PRACTICE II This course is designed to build upon DEBP 810 and further develop an understanding of the evidence-based process. DEBP 820 will include (2) searching for the best evidence, (3) critical appraisal of the evidence, and (4) integration of the evidence with clinical expertise. Through careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, examine human subject research and the IRB process, complete a literature review, critically appraise and synthesize the evidence, develop an evidence-based recommendation, and create a doctoral project proposal.

A study of critical analysis and utilization of research evidence to improve health care outcomes, advance the nurse anesthesia profession, and affect health care policy is the focus. Emphasis is on the translation of research knowledge into practice through planned change processes and includes an in-depth study of the steps involved in implementing evidence-based practice. Activities are designed to facilitate development of the DNAP project. Credits: 2.00

Learning D13, D14, D23, D26, D27, D30, D33, D34, Objectives: D35, D36, D37, D44, D45, D46, D47, D48

DEBP 830: EVIDENCE-BASED PRACTICE III This course is designed to build upon DEBP 820 and further develop an understanding for the evidencebased process. DEBP 830 will examine steps 5 and 6 of the evidence-based process: Step (5) evaluate the outcomes of practice change based on evidence and (6) disseminate the outcomes of the evidence-based practice change. Through the careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, complete a literature review, write a review of the literature, appraise the literature, write a proposal for a doctoral project, and present this proposal. This course focuses on the creation of a project, the development of a plan for implementation, and the development of a plan for evaluation to improve practice or healthcare outcomes. SRNAs will work in their groups under the direction of the course instructor to present their projects. It will be presented in a hybrid format (web-based and face-toface) as a majority of work will be completed on the group's time. Credits: 2.00

Learning D13, D14, D23, D26, D30, D31, D32, D33, Objectives: D34, D35, D36, D34, D38, D41, D44, D45, D46, D47, D48, D49, D50

DEBP 830: EVIDENCE-BASED PRACTICE III

This course is designed to build upon DEBP 820 and further develop an understanding for the evidencebased process. DEBP 830 will examine steps 5 and 6 of the evidence-based process: Step (5) evaluate the outcomes of practice change based on evidence and (6) disseminate the outcomes of the evidence-based practice change. Through the careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, complete a literature review, write a review of the literature, appraise the literature, write a proposal for a doctoral project, and present this proposal. This course focuses on the creation of a project, the development of a plan for implementation, and the development of a plan for evaluation to improve practice or healthcare outcomes. SRNAs will work in their groups under the direction of the course instructor to present their projects. It will be presented in a hybrid format (web-based and face-toface) as a majority of work will be completed on the group's time.

Credits: 2.00

Learning D13, D14, D23, D26, D30, D31, D32, D33, Objectives: D34, D35, D36, D34, D38, D41, D44, D45, D46, D47, D48, D49, D50

DEBP 830: EVIDENCE-BASED PRACTICE III

This course is designed to build upon DEBP 820 and further develop an understanding for the evidencebased process. DEBP 830 will examine steps 5 and 6 of the evidence-based process: Step (5) evaluate the outcomes of practice change based on evidence and (6) disseminate the outcomes of the evidence-based practice change. Through the careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, complete a literature review, write a review of the literature, appraise the literature, write a proposal for a doctoral project, and present this proposal. This course focuses on the creation of a project, the development of a plan for implementation, and the development of a plan for evaluation to improve practice or healthcare outcomes. SRNAs will work in their groups under the direction of the course instructor to present their projects. It will be presented in a hybrid format (web-based and face-toface) as a majority of work will be completed on the group's time.

Čredits: 2.00

Learning D13, D14, D23, D26, D30, D31, D32, D33, Objectives: D34, D35, D36, D34, D38, D41, D44, D45, D46, D47, D48, D49, D50

DEBP 830: EVIDENCE-BASED PRACTICE III

This course is designed to build upon DEBP 820 and further develop an understanding for the evidencebased process. DEBP 830 will examine steps 5 and 6 of the evidence-based process: Step (5) evaluate the outcomes of practice change based on evidence and (6) disseminate the outcomes of the evidence-based practice change. Through the careful exploration of these steps, the doctoral learner will participate in group discussions, listen to lectures, complete a literature review, write a review of the literature, appraise the literature, write a proposal for a doctoral project, and present this proposal. This course focuses on the creation of a project, the development of a plan for implementation, and the development of a plan for evaluation to improve practice or healthcare outcomes. SRNAs will work in their groups under the direction of the course instructor to present their projects. It will be presented in a hybrid format (web-based and face-toface) as a majority of work will be completed on the group's time.

Čredits: 2.00

Learning D13, D14, D23, D26, D30, D31, D32, D33, Objectives: D34, D35, D36, D34, D38, D41, D44, D45, D46, D47, D48, D49, D50

DEDU 830: Introduction to the Nurse Anesthesia Profession

DEDU 830: INTRODUCTION TO THE NURSE ANESTHESIA PROFESSION

This course is designed to introduce the profession and professionalism of nurse anesthesia. A careful exploration of the history and practice of nurse anesthesia will develop foundational knowledge of the profession. Examination of concepts related to the professional role of a nurse anesthetist will include advocacy, emotional intelligence, scholarship, and wellness. Course learning will include multi-media methodology, guest lectures, and collaboration with peers.

 Credits: 2.00
 D13, D23, D26, D30, D33, D34, D36, D37,

Objectives: D39, D41, D48 Delivery Format: Online

DEDU 830: INTRODUCTION TO THE NURSE ANESTHESIA PROFESSION

This course is designed to introduce the profession and professionalism of nurse anesthesia. A careful exploration of the history and practice of nurse anesthesia will develop foundational knowledge of the profession. Examination of concepts related to the professional role of a nurse anesthetist will include advocacy, emotional intelligence, scholarship, and wellness. Course learning will include multi-media methodology, guest lectures, and collaboration with peers.

Credits: 2.00 Learning D13, D23, D25, D26, D30, D33, D34, D36, Objectives: D37, D39, D41, D48 Delivery Format: Online

DEDU 830: INTRODUCTION TO THE NURSE ANESTHESIA PROFESSION

This course is designed to introduce the profession and professionalism of nurse anesthesia. A careful exploration of the history and practice of nurse anesthesia will develop foundational knowledge of the profession. Examination of concepts related to the professional role of a nurse anesthetist will include advocacy, emotional intelligence, scholarship, and wellness. Course learning will include multi-media methodology, guest lectures, and collaboration with peers. Credits: 2.00

Learning D13, D23, D26, D30, D33, D34, D36, D37, Objectives: D39, D41, D48 Delivery Format: Online

DEDU 830 : INTRODUCTION TO THE NURSE ANESTHESIA PROFESSION

This course is designed to introduce the profession and professionalism of nurse anesthesia. A careful exploration of the history and practice of nurse anesthesia will develop foundational knowledge of the profession. Examination of concepts related to the professional role of a nurse anesthetist will include advocacy, emotional intelligence, scholarship, and wellness. Course learning will include multi-media methodology, guest lectures, and collaboration with peers.

Credits: 2.00

Learning D13, D23, D26, D30, D33, D34, D36, D37, Objectives: D39, D41, D48 Delivery Format: Online

DEDU 840: HEALTHCARE Policy, Business, and Legal Issues

DEDU 840: HEALTHCARE POLICY, BUSINESS, AND LEGAL ISSUES

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

Credits: 3.00

Learning D5, D13, D14, D23, D26, D30, D31, D32, D34, Objectives: D35, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48, D51

DEDU 840: HEALTHCARE POLICY, BUSINESS, AND LEGAL ISSUES

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

Credits: 3.00

Learning D26, D27, D28, D32, D33, D34, D36, D37, Objectives: D38, D40, D41, D42, D43, D44, D47, D51

DEDU 840: Healthcare Policy, Business, and Legal Issues

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

Credits: 3.00

Learning D26, D27, D28, D32, D33, D34, D36, D37, Objectives: D38, D40, D41, D42, D43, D44, D47, D51

DEDU 840: HEALTHCARE POLICY, BUSINESS, AND LEGAL ISSUES

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

Credits: 2.00

Learning D26, D27, D28, D32, D33, D34, D36, D37, Objectives: D38, D40, D41, D42, D43, D44, D47, D51

DEDU 850: QUALIT 50: Quality Improvement for Safety and Wellness in Patient Populations

DEDU 850: QUALITY IMPROVEMENT FOR SAFETY

AND WELLNESS IN PATIENT POPULATIONS Epidemiology focuses on the distribution and determinants of disease frequency in human populations. This course prepares the student to use epidemiological strategies to examine patterns of illness or injury in groups of people as well as threats to patient safety. Concepts of health, risk, and disease causality are examined. Implications for development of databased programs for disease/injury prevention, quality improvement directed at improving individuals and aggregates receiving anesthesia are discussed. Further exploration of Quality Improvement for aggregates and individuals receiving anesthesia is achieved by providing opportunities to analyze, synthesize, and apply knowledge of quality improvement and patient safety in anesthesia practice. The course examines the theoretical basis of human error, introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis resource management and monitoring systems in anesthesia practice.

Credits: 2.00

Learning D1, D2, D4, D5, D6, D7, D9, D10, D11, D13, Objectives: D14, D16, D21, D22, D23, D26, D30, D32, D35, D36, D37, D38, D43, D44, D45, D46, D47, D49, D50

DEDU 850: QUALITY IMPROVEMENT FOR SAFETY

AND WELLNESS IN PATIENT POPULATIONS Epidemiology focuses on the distribution and determinants of disease frequency in human populations. This course prepares the student to use epidemiological strategies to examine patterns of illness or injury in groups of people as well as threats to patient safety. Concepts of health, risk, and disease causality are examined. Implications for development of databased programs for disease/injury prevention, quality improvement directed at improving individuals and aggregates receiving anesthesia are discussed. Further exploration of Quality Improvement for aggregates and individuals receiving anesthesia is achieved by providing opportunities to analyze, synthesize, and apply knowledge of quality improvement and patient safety in anesthesia practice. The course examines the theoretical basis of human error, introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis resource management and monitoring systems in anesthesia practice.

Credits: 3.00

Learning D1, D2, D4, D5, D6, D7, D9, D10, D11, D13, Objectives: D14, D16, D21, D22, D23, D26, D30, D32, D35, D36, D37, D38, D43, D44, D45, D46, D47, D49, D50

DEDU 850: QUALITY IMPROVEMENT FOR SAFETY AND WELLNESS IN PATIENT POPULATIONS

Epidemiology focuses on the distribution and determinants of disease frequency in human populations. This course prepares the student to use epidemiological strategies to examine patterns of illness or injury in groups of people as well as threats to patient safety. Concepts of health, risk, and disease causality are examined. Implications for development of databased programs for disease/injury prevention, quality improvement directed at improving individuals and aggregates receiving anesthesia are discussed. Further exploration of Quality Improvement for aggregates and individuals receiving anesthesia is achieved by providing opportunities to analyze, synthesize, and apply knowledge of quality improvement and patient safety in anesthesia practice. The course examines the theoretical basis of human error, introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis resource management and monitoring systems in anesthesia practice.

Credits: 3.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D13, Objectives: D14, D15, D16, D17, D18, D19, D21, D22, D23, D25, D26, D30, D31, D33, D34, D35, D36, D38, D44, D45, D46, D47

DEDU 850: QUALITY IMPROVEMENT FOR SAFETY

AND WELLNESS IN PATIENT POPULATIONS Epidemiology focuses on the distribution and determinants of disease frequency in human populations. This course prepares the student to use epidemiological strategies to examine patterns of illness or injury in groups of people as well as threats to patient safety. Concepts of health, risk, and disease causality are examined. Implications for development of databased programs for disease/injury prevention, quality improvement directed at improving individuals and aggregates receiving anesthesia are discussed. Further exploration of Quality Improvement for aggregates and individuals receiving anesthesia is achieved by providing opportunities to analyze, synthesize, and apply knowledge of quality improvement and patient safety in anesthesia practice. The course examines the theoretical basis of human error, introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis resource management and monitoring systems in anesthesia practice.

Credits: 2.00

Learning D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D13, Objectives: D14, D15, D16, D17, D18, D19, D21, D22, D23, D25, D26, D30, D31, D33, D34, D35, D36, D38, D44, D45, D46, D47

DEDU 860-890: CONCEPTS IN CLINICAL: APPLICATION & P ION & PRACTICE I-IV

DEDU 820: ETHICS, LEADERSHIP AND MULTICULTURAL HEALTHCARE IN NURSE ANESTHESIA

The course is introduced with a review of philosophical foundations of applied and professional ethics, including ethical decision making. Within nursing as a profession, and nurse anesthesia as a specialty within nursing, are found statements of ethical promises made to society over time. Members of these professions are expected to act according to these ethical promises. For Certified Registered Nurse Anesthetists, these promises are codified in the American Association of Nurse Anesthetists Code of Ethics. As advanced practice nurses, Certified Registered Nurse Anesthetists care for patients across the lifespan. The focus of the course will be related to ethical issues in nurse anesthesia practice and ethical practice issues across advanced nursing specialties. Multi- cultural variances will be a sub-focus in this course with readings and discussions to address the everchanging role of culture in society and the effects of culture in healthcare, patient care delivery, and patient preferences. Credits: 2.00

Ologitor 2100	
Learning	D6, D13, D26, D30, D31, D32, D33, D35,
Objectives:	D40, D44

DEDU 820: ETHICS, LEADERSHIP AND MULTICULTURAL HEALTHCARE IN NURSE ANESTHESIA

The course is introduced with a review of philosophical foundations of applied and professional ethics, including ethical decision making. Within nursing as a profession, and nurse anesthesia as a specialty within nursing, are found statements of ethical promises made to society over time. Members of these professions are expected to act according to these ethical promises. For Certified Registered Nurse Anesthetists, these promises are codified in the American Association of Nurse Anesthetists Code of Ethics. As advanced practice nurses, Certified Registered Nurse Anesthetists care for patients across the lifespan. The focus of the course will be related to ethical issues in nurse anesthesia practice and ethical practice issues across advanced nursing specialties. Multi- cultural variances will be a sub-focus in this course with readings and discussions to address the everchanging role of culture in society and the effects of culture in healthcare, patient care delivery, and patient preferences. Credits: 3.00

Learning

D6, D13, D25, D26, D27, D31, D33, D35, Objectives: D36 D37 D44

DEDU 820: ETHICS, LEADERSHIP AND MULTICULTURAL HEALTHCARE IN NURSE ANESTHESIA

The course is introduced with a review of philosophical foundations of applied and professional ethics, including ethical decision making. Within nursing as a profession, and nurse anesthesia as a specialty within nursing, are found statements of ethical promises made to society over time. Members of these professions are expected to act according to these ethical promises. For Certified Registered Nurse Anesthetists, these promises are codified in the American Association of Nurse Anesthetists Code of Ethics. As advanced practice nurses, Certified Registered Nurse Anesthetists care for patients across the lifespan. The focus of the course will be related to ethical issues in nurse anesthesia practice and ethical practice issues across advanced nursing specialties. Multi- cultural variances will be a sub-focus in this course with readings and discussions to address the everchanging role of culture in society and the effects of culture in healthcare, patient care delivery, and patient preferences. Credits: 3.00

Learning Objectives:

D6, D13, D26, D30, D31, D32, D33, D35, D40, D44

DEDU 820 : Ethics, Leadership and Multicultural Healthcare in Nurse Anesthesia

The course is introduced with a review of philosophical foundations of applied and professional ethics, including ethical decision making. Within nursing as a profession, and nurse anesthesia as a specialty within nursing, are found statements of ethical promises made to society over time. Members of these professions are expected to act according to these ethical promises. For Certified Registered Nurse Anesthetists, these promises are codified in the American Association of Nurse Anesthetists Code of Ethics. As advanced practice nurses, Certified Registered Nurse Anesthetists care for patients across the lifespan. The focus of the course will be related to ethical issues in nurse anesthesia practice and ethical practice issues across advanced nursing specialties. Multi- cultural variances will be a sub-focus in this course with readings and discussions to address the everchanging role of culture in society and the effects of culture in healthcare, patient care delivery, and patient preferences.

Credits: 2.00 Learning Objectives:

D6, D13, D26, D30, D31, D32, D33, D35, D40, D44

DEDU 860: Concepts in Clinical: Application & Practice I

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, Objectives: D22, D23, D24

DEDU 860: SENIOR BOARD REVIEW I

This course series is designed to assist the student in preparation for the Self-Evaluation Exam (SEE) and for the National Certification Exam (NCE), by integrating didactic and clinical knowledge. Both of these exams are administered through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). The primary review materials use APEX Anesthesia Review for studying and assessing knowledge.

 Credits: 3.00
 D5, D6, D7, D13, D14, D18, D19, D20, D21,

 Objectives:
 D22, D23, D24

DEDU 860: Senior Board Review I

This course series is designed to assist the student in preparation for the Self-Evaluation Exam (SEE) and for the National Certification Exam (NCE), by integrating didactic and clinical knowledge. Both of these exams are administered through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). The primary review materials use APEX Anesthesia Review for studying and assessing knowledge.

Credits: 3.00

Learning Objectives:

D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 860: Senior Board Review I

This course series is designed to assist the student in preparation for the Self-Evaluation Exam (SEE) and for the National Certification Exam (NCE), by integrating didactic and clinical knowledge. Both of these exams are administered through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). The primary review materials use APEX Anesthesia Review for studying and assessing knowledge.

Credits: 3.00

Learning Objectives:

ng D5, D6, D7, D13, D14, D18, D19, D20, D21, ives: D22, D23, D24

DEDU 870: CONCEPTS IN CLINICAL: Application & Practice II

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00

Learning Objectives: D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 870: Senior Board Review II

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking is emphasized during the review sessions. During each semester the students are on campus for focused review sessions facilitated by the faculty members. Review materials include the use of approved online board review course, assigned readings, and comprehensive examinations. Credits: 3.00

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, Objectives: D22, D23, D24

DEDU 870: SENIOR BOARD REVIEW II This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking is emphasized during the review sessions. During each semester the students are on campus for focused review sessions facilitated by the faculty members. Review materials include the use of approved online board review course, assigned readings, and comprehensive examinations. Credits: 3.00

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 870: SENIOR BOARD REVIEW II

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking is emphasized during the review sessions. During each semester the students are on campus for focused review sessions facilitated by the faculty members. Review materials include the use of approved online board review course, assigned readings, and comprehensive examinations. Credits: 3.00

Learning Objectives:

D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 880: CONCEPTS IN CLINICAL: Application & Practice III

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00 Learning Objectives:

D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 880: CONCEPTS IN CLINICAL: Application & Practice III

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00 Learning Objectives:

D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

D5, D6, D7, D13, D14, D18, D19, D20, D21,

DEDU 880: CONCEPTS IN CLINICAL: Application & Practice III

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00 Learning Objectives:

Objectives: D22, D23, D24 DEDU 880: Senior Board Review III

This course series is designed to assist the student in preparation for the national certification examination by integrating clinical and didactic knowledge. Application of information and critical thinking will be emphasized during the review sessions. During each semester the students will be on campus for focused review sessions that will be facilitated by the faculty members. Review materials will include the use of APEX Anesthesia Review, assigned readings, and comprehensive examinations.

Credits: 3.00 Learning

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, Objectives: D22, D23, D24

DEDU 890: CONCEPTS IN CLINICAL: Application & Practice IV

This course is designed to assist the student with final preparation for the National Certification Exam (NCE) through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). Online resources (APEX and Prodigy), are utilized this semester for studying and assessing your readiness for the NCE. The Apex password protected comprehensive exams, Prodigy exams, and the second SEE are used for determination of grades in the course. MTSA's required benchmark must be achieved this semester. Credits: 6.00 Learning D5 D6 D7 D13 D14 D18 D19 D20 D21

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 890: SENIOR BOARD REVIEW IV This course is designed to assist the student with final preparation for the National Certification Exam (NCE) through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). Online resources (APEX and Prodigy), are utilized this semester for studying and assessing your readiness for the NCE. The Apex password protected comprehensive exams, Prodigy exams, and the second SEE are used for determination of grades in the course. MTSA's required benchmark must be achieved this semester. Credits: 6.00 D5, D6, D7, D13, D14, D18, D19, D20, D21, Learning

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, Objectives: D22, D23, D24

DEDU 890: SENIOR BOARD REVIEW IV This course is designed to assist the student with final preparation for the National Certification Exam (NCE) through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). Online resources (APEX and Prodigy), are utilized this semester for studying and assessing your readiness for the NCE. The Apex password protected comprehensive exams, Prodigy exams, and the second SEE are used for determination of grades in the course. MTSA's required benchmark must be achieved this semester. Credits: 6.00

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DEDU 890: Senior Board Review IV

This course is designed to assist the student with final preparation for the National Certification Exam (NCE) through the National Board on Certification and Recertification of Nurse Anesthetists (NBCRNA). Online resources (APEX and Prodigy), are utilized this semester for studying and assessing your readiness for the NCE. The Apex password protected comprehensive exams, Prodigy exams, and the second SEE are used for determination of grades in the course. MTSA's required benchmark must be achieved this semester. Credits: 6.00

Learning D5, D6, D7, D13, D14, D18, D19, D20, D21, D22, D23, D24

DMAT 800: MATH FOR Nurse Anesthetists

DMAT 800: MATH FOR NURSE ANESTHETISTS This course will build upon the math skills developed in the undergraduate nursing program of study. Emphasis will be placed on dosage calculations, dilutions, ratios, and conversions as they relate to time, temperature, pressure, and concentration. Each concept will be taught as it relates to the practice of nurse anesthesia. Students will be required to calculate the administration dosages of medicines used in both general and regional anesthesia, for patients of all ages, body mass indexes, and physical conditions. Classroom time will be used to present various patient related scenarios, and students will learn to apply knowledge to clinical practice in decision making and problem solving. Credits: 1.00

Learning Objectives: D13, D17, D20 Delivery Format: Online

DMEA 800: Machine & Equipment of Anesthesia

DMEA 800: MACHINE & EQUIPMENT OF ANESTHESIA

This course provides a detailed orientation to anesthesia delivery systems. The goal of this course will be to give the learner in-depth anesthesia machine and equipment knowledge, that can then be applied in clinical training and practice. Topics covered in the course incudes: anesthesia machines, gases, vaporizers, breathing circuits, ventilators, patient monitoring, airway equipment, provider vigilance, safety, and quality. This course spans one semester and is three credit hours. **Credits:** 3.00

Learning D1, D3, D13, D18, D19, D20, D21, D22, Objectives: D23

DMEA 800: MACHINE & EQUIPMENT OF ANESTHESIA

This course provides a detailed orientation to anesthesia delivery systems. The goal of this course will be to give the learner in-depth anesthesia machine and equipment knowledge, that can then be applied in clinical training and practice. Topics covered in the course incudes: anesthesia machines, gases, vaporizers, breathing circuits, ventilators, patient monitoring, airway equipment, provider vigilance, safety, and quality. This course spans one semester and is three credit hours. **Credits:** 3.00

Learning D1, D4, D13, D14, D17, D18, D19, D20, D21, Objectives: D22, D23, D26, D29, D33, D35, D36

DMEA 800: MACHINE & EQUIPMENT OF ANESTHESIA

This course provides a detailed orientation to anesthesia delivery systems. The goal of this course will be to give the learner in-depth anesthesia machine and equipment knowledge, that can then be applied in clinical training and practice. Topics covered in the course incudes: anesthesia machines, gases, vaporizers, breathing circuits, ventilators, patient monitoring, airway equipment, provider vigilance, safety, and quality. This course spans one semester and is three credit hours. **Credits:** 3.00

Learning D1, D4, D13, D14, D17, D18, D19, D20, D21, Objectives: D22, D23, D26, D29, D33, D35, D36

DMEA 800: MACHINE & EQUIPMENT OF ANESTHESIA

This course provides a detailed orientation to anesthesia delivery systems. The goal of this course will be to give the learner in-depth anesthesia machine and equipment knowledge, that can then be applied in clinical training and practice. Topics covered in the course incudes: anesthesia machines, gases, vaporizers, breathing circuits, ventilators, patient monitoring, airway equipment, provider vigilance, safety, and quality. This course spans one semester and is three credit hours. **Credits:** 3.00

Learning D1, D4, D13, D14, D17, D18, D19, D20, D21, Objectives: D22, D23, D26, D29, D33, D35, D36

DPCE 800: Physics, Chemistry, and Biochemistry for Nurse Anesthesia

DPCE 800: Physics, Chemistry, and Biochemistry for Nurse Anesthesia

This course relates the physical principles and laws of the universe to the science and practice of anesthesia. The student is then shown how the physical forces of matter and energy may be controlled, regulated, and applied in the form of scientific and efficient anesthesia administration. A review of drug related mathematics is a part of this class. Lectures, problem-solving coaching, active learning sessions, and worksheets will be used to ensure that students are capable of transferring what is learned in this class to their final performance evaluation.

Credits: 2.00 Learning Objectives: D13, D17, D19, D20

DPCE 800: Physics, Chemistry, and Biochemistry for Nurse Anesthesia

This course relates the physical principles and laws of the universe to the science and practice of anesthesia. The student is then shown how the physical forces of matter and energy may be controlled, regulated, and applied in the form of scientific and efficient anesthesia administration. A review of drug related mathematics is a part of this class. Lectures, problem-solving coaching, active learning sessions, and worksheets will be used to ensure that students are capable of transferring what is learned in this class to their final performance evaluation.

Credits: 2.00

Learning D1, D3, D4, D9, D10, D13, D14, D15, D16, D17, Objectives: D18, D19, D20, D21, D22, D23, D30, D35, D37

DPCE 800: Physics, Chemistry, and Biochemistry for Nurse Anesthesia

This course relates the physical principles and laws of the universe to the science and practice of anesthesia. The student is then shown how the physical forces of matter and energy may be controlled, regulated, and applied in the form of scientific and efficient anesthesia administration. A review of drug related mathematics is a part of this class. Lectures, problem-solving coaching, active learning sessions, and worksheets will be used to ensure that students are capable of transferring what is learned in this class to their final performance evaluation.

Credits: 2.00

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DREL 800-810: Religion and a Christian Worldview I-II

DREL 800: Religion and a Christian Worldview I

These courses address the spiritual component of MTSA's philosophy that true education involves the growth of the spiritual, intellectual, and physical aspects of the student. The Religion 800 section includes lectures, reading, and discussion designed to help students explore their spiritual beliefs and how those beliefs will impact their professional life as nurse anesthetists.

Credits: 1.00

Learning Objectives: D6, D13, D34, D35, D39

DREL 800: Religion and a Christian Worldview I

These courses address the spiritual component of MTSA's philosophy that true education involves the growth of the spiritual, intellectual, and physical aspects of the student. The Religion 800 section includes lectures, reading, and discussion designed to help students explore their spiritual beliefs and how those beliefs will impact their professional life as nurse anesthetists.

Credits: 1.00

Learning Objectives: D6, D13, D34, D35, D39

DREL 800: Religion and a Christian Worldview I

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Learning Objectives: D6, D13, D34, D35, D39

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Credits: 1.00

Learning Objectives: D6, D13, D34, D35, D39

DREL 810: Religion and a Christian Worldview II

These courses address the spiritual component of MTSA's philosophy that true education involves the growth of the spiritual, intellectual, and physical aspects of the student. Religion 810 focuses on the personal impact of one's spiritual worldview and examines specific doctrines of Judeo-Christian beliefs through the frame of Seventh-day Adventist Theology. This gives the student the opportunity to deeply consider their own beliefs.

Credits: 1.00

Learning Objectives: D6, D13, D34, D35, D39

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