RUSH UNIVERSITY
COLLEGE OF HEALTH SCIENCES

Department of Cardiopulmonary Sciences
Cardiovascular Perfusion Program
Program Handbook
2026-2028

DEPARTMENT FACULTY

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David Chabot, MS, CCP, LP	Assistant Professor
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Priscilla Alvarez, MS	Department Manager

Revised: August 2026

CLINICAL AFFILIATES

Advocate Christ Medical Center 4440 W. 95th Street, Chicago, IL 60647	**New York-Presbyterian Morgan Stanley Children's Hospital** 3959 Broadway, New York, NY 10032
Advocate Children's Hospital 4440 W 95th St, Oak Lawn, IL 60453	**New York Presbyterian/Weill Cornell** 525 East 68th Street, New York, New York 10032
Alexian Brothers Housing and Health Alliance-Bonaventure House 825 W. Wellington Chicago, IL 60657	**Northwestern University Medical Center** 251 E. Huron Street, Chicago, Illinois 60613
Allina Health Systems 2925 Chicago Avenue, South Minneapolis, MN 55405	**Norton's Children Hospital** 4967 U.S. Highway 42, Suite 101 Louisville, Kentucky 40222
Baptist Hospital Miami 8900 Kendall Drive, Miami, FL 33176	**Ochsner Clinic Foundation** 1514 Jefferson Highway, New Orleans, LA 70121
Barnes Jewish 1 Barnes-Jewish Hospital Plaza St. Louis, Missouri 63110	**OSF St. Francis** 530 N.E. Glen Oak Avenue, Peoria, Illinois 61637
Beth Israel Deaconess Medical Center 330 Brookline Avenue, Boston, MA 02215	**Perfusion Associates of Michigan Inc.** 2253 Durham Drive, Saginaw Michigan 48609
Cedar Sinai Medical Center 8700 Beverly Blvd.,Los Angeles, CA 90048	**Perfusion Technologists of Greater Chicago, INC**. PO Box 713, Oak Forest, IL 60452
Henry Ford Hospital 2799 W Grand Blvd, Detroit, MI 48202	**Rush University Medical Center** 1620 W Harrison St. Chicago, IL 60612
Hospital of the University of Pennsylvania 3400 Spruce Street, Philadelphia, PA 19104	**Spectrum Health** 100 Michigan Street, Grand Rapids, Michigan 49503
IU Health System I-65 21st Street Indianapolis, Indiana 46206	**St. John Providence Health System** 28000 Dequindre, Warren, Michigan 48092
Lahey Clinic Hospital, INC.41 Mall Road Burlington, MA 01805	**St. John's Springfield** 800 E.Carpenter Street Springfield, Illinois 62769
Loyola Medical Center 2160 South First Avenue Maywood, Illinois 60153	**Stroger Cook County** 1901 W. Harrison Street Chicago, IL 60612

Lurie Children's Hospital 225 East Chicago Ave, Chicago, Illinois 60611	**Tacoma General Hospital** 820 A Street, Tacoma, Washington 98402
Lutheran Hospital of Indiana 7950 W. Jefferson Blvd. Fort Wayne, Indiana 4680	**Thedacare Regional Medical Center** 1818 N. Meade Street Appleton, Wisconsin 54911
Lutheran Hospital of Indiana 7950 W. Jefferson Blvd. Fort Wayne, Indiana 4680	**University of Cleveland- Harrington** 11100 Euclid Avenue, Cleveland, Ohio 44106
Mayo Clinic 201 West Center Street, Rochester, Minnesota 55902	**UI Health** 1740 W Taylor St, Chicago, IL 60612
Mercy One Des Moines Medical Center East Tower, 1111 6th Avenue Des Moines, IA 50314	**University of Florida Health Shands Hospital** 1515 SW Archer Rd., Gainesville, FL 32608
New York-Presbyterian / Columbia University Irving Medical Center 622 W 168th St, New York, NY 10032	

RUSH UNIVERSITY
COLLEGE OF HEALTH SCIENCES
CARDIOVASCULAR PERFUSION PROGRAM

TABLE OF CONTENTS

Rush University College of Health Sciences
Department of Cardiopulmonary Sciences
Master of Science in Cardiovascular Perfusion

EDUCATIONAL PHILOSOPHY

The Cardiovascular Perfusion Program prepares professionals with skills to effectively operate as perfusionists within the complex, challenging, and changing health care environment. The learning within the Cardiovascular Perfusion Program is driven by the core belief that it is essential for a Perfusionist to demonstrate expert problem-solving skills, critical thinking skills, positive attitudes toward professional involvement and continuing education and to be adept in the use of evidence-based practice. The Cardiovascular Perfusion Program curriculum is based on a comprehensive science foundation, integration of patient care, and fostering clinical decision-making skills. The Cardiovascular Perfusion Program learning experience will instill a commitment to lifelong learning as a means by which graduates can deal with and influence the direction of change in the profession.

The Cardiovascular Perfusion Program is dedicated to the mission, vision, and values of the College, University, and Medical Center.

MISSION OF RUSH UNIVERSITY MEDICAL CENTER

The mission of Rush is to improve the health of the individuals and diverse communities we serve through the integration of outstanding patient care, education, research and community partnerships.

RUSH UNIVERSITY VISION

Rush will be the leading academic health system in the region and nationally recognized for transforming health care.

COLLEGE OF HEALTH SCIENCES MISSION

The Mission of the College of Health Sciences is to advance the quality and availability of health care through excellence in education, research and scholarship, service and patient care. The college promotes the values of diversity, access and inclusion in all of its endeavors.

COLLEGE OF HEALTH SCIENCES VISION

The College of Health Sciences at Rush University will be a world-class school of allied health sciences whose programs are recognized as among the best in the United States.

DEPARTMENT OF CARDIOPULMONARY SCIENCES DIVISION OF CARDIOVASCULAR PERFUSION VISION AND MISSION

Vision Statement

The Cardiovascular Perfusion Program will be recognized as a program providing the highest quality curriculum whose graduates serve as professionals who are innovative, research-driven, experts in the field. The program is committed to fostering ethical practice and professional integrity in alignment with the American Society of Extracorporeal Technology Code of Ethics and Standards of Practice.

Mission Statement

The mission of the Cardiovascular Perfusion Program is to prepare competent entry-level perfusionists with the knowledge, skills, and disposition to effectively carry out the responsibilities of the profession. The program provides an experiential learning platform that prepares graduates to act as skillful professionals who demonstrate critical thinking multi-disciplinary collaboration, research expertise and commitment, professional awareness, and leadership in alignment with the values of Rush University. The program further promotes ethical decision-making, patient advocacy, and professional conduct consistent with the American Society of Extracorporeal Technology Code of Ethics and Standards of Practice..

CARDIOVASCULAR PERFUSION PROGRAM GOALS AND OBJECTIVES

Entry level program goals/objectives: Graduates of the program will be prepared to function as a competent entry-level practitioner in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains.

Standards:

a. Upon completion of the program, all students will demonstrate the ability to comprehend, apply and evaluate information relevant to the role of the cardiovascular perfusionist.

b. Upon completion of the program, all students will demonstrate technical proficiency in

the skills necessary to fulfill the role of a cardiovascular perfusionist.

c. Upon completion of the program, all students will demonstrate personal behaviors consistent with professional and employer expectations for the cardiovascular perfusion practitioner.

In addition to these competency goals, the program seeks to develop graduates who can:

Advance Clinical Practice

- Demonstrate critical thinking to improve patient outcomes.
- Collaborate with multidisciplinary teams in the management of patients requiring mechanical circulatory assist devices.
- Optimize patient care by employing multiple blood management strategies during cardiopulmonary bypass procedures.

Leadership

- Plan, organize, and deliver high quality, cost-effective health care services.
- Commitment to lifelong learning and a strong sense of service.
- Participate in professional organizations.

Teach

- Demonstrate effective clinical education strategies.
- Describe and apply common theories associated with clinical education and behavioral change.

Research

- Formulate appropriate questions, organize and test hypotheses, interpret research results and summarize findings.
- Critique evidence and apply findings to the practice of cardiovascular perfusion.

Demonstrate Professionalism

- Demonstrate professional spoken and written communication appropriate for the profession.
- Demonstrate ability to work as a team member.
- Demonstrate Rush ICARE values in interactions with patients, students, faculty, and healthcare team.
- Demonstrate confidentiality related to protected health information.

STUDENT LEARNING OUTCOMES:

The student learning outcomes are aligned with the 12 required units of learning which align with the standards and guidelines for Perfusion Programs. These learning outcomes provide what learners will be able to know and do as a result of the course of study in the program.

1. *Demonstrate knowledge and skill in basic science concepts including the following areas of concentration:*
    a. Cardiovascular Anatomy
    b. Pathology and Surgical Repair
    c. Physiology
    d. Pharmacology
    e. Physics
    f. Chemistry
    g. Mathematics
    h. Immunology
2. *Apply concepts and skills to effectively use the technology, equipment, and machines used in cardiopulmonary bypass including skills in applying:*
    a. Extracorporeal Circuit Components for CBP
    b. Cardiopulmonary Bypass Techniques
    c. Adequacy of Perfusion
    d. Myocardial Preservation
    e. Systemic Hypothermia
    f. Blood Conservation Techniques
    g. Special Considerations in Perfusion
    h. Crisis Resource Management
    i. Adjunctive Techniques
    j. Patient Monitoring
    k. Organ Transplantation
    l. Cancer Therapeutics
3. *Demonstrate proficiency in Mechanical Assist Techniques including skills in:*
    a. Extracorporeal Life Support Techniques

   b. Intra-Aortic Balloon Pumping (IABP)
   c. Ventricular Assist Devices
4. *Identify and apply principles of laboratory analysis including analysis in the following areas:*
   a. Overview of Laboratory analysis
   b. Special Chemistry
   c. Blood Chemistry
   d. Coagulation and Hematology
5. *Apply skills in biomedical engineering as it applies to using:*
   a. Biomedical Instrumentation
   b. Biophysical Transport Phenomenon
   c. Biomedical Electrical Safety
   d. Medical and Diagnostic Imaging Technology
6. *Demonstrate skills in managing safety in areas of:*
   a. Blood/Fluid Exposure
   b. Patient Safety
7. *Demonstrate knowledge of continuous quality assurance and CQI for the Perfusionist.*
8. *Demonstrate understanding of medical ethics.*
9. *Understand the historical development of extracorporeal technology.*
10. *Apply research methods to research in the field.*
11. *Demonstrate understanding of Business Practice Regulatory Agencies.*
12. *Apply knowledge of emergency preparedness.*

ACCREDITATION

The Rush University Cardiovascular Perfusion Program is currently in continuing accreditation by the Accreditation Committee for Perfusion Education. After graduating from the perfusion program, you will be qualified to sit for the certification examination of the American Board of Cardiovascular Perfusion.

Commission on Accreditation of Allied Health Education Programs
9355 13th St North, #7709, Seminole, FL 33775
Phone: (727) 210-2350

CLASS AND CLINICAL HOURS

The program provides classroom study, laboratory study, and observations at Rush University Medical center and area hospitals for clinical experiences. Courses are arranged on a set schedule and sequence, and each course is only offered once a year. The first three semester observations meet in area hospitals and will have varying shift assignments, including nighttime and weekend, depending on the clinical experience. Students are expected to provide their own transportation to clinical observation sites.

To note, second-year student rotations will include clinical rotations outside of the Chicago metropolitan area. This entails living at varying locations throughout the United States at the student's expense.

While it does not occur often, when necessary, the program reserves the right to adjust class schedules, times and program sequencing; this may include evening classes and last-minute clinical rotation changes.

CLASSROOM VISITOR POLICY

All courses within the program are considered **closed classes**. Attendance is limited to students officially enrolled in the course and designated faculty or staff. Any visitor, including prospective students, incoming students, observers, or other guests, must receive **prior approval from the course professor** before attending or observing any class, laboratory, simulation, or other instructional activity.

PROGRAM OF STUDY/COURSE DESCRIPTIONS

Program of Study for Cardiovascular Perfusion First Year Fall Semester (17 SH)	**Credit Hours**
CVP 605 Cardiopulmonary Anatomy and Physiology This course provides an introduction to cardiac and pulmonary anatomy, hemodynamic function and electrophysiology. Students will focus on gas laws and how they apply both to human lung function as well as artificial lung function. In addition, the students will focus on the anatomy and physiology of the human heart and vascular system. Emphasis is placed on the application of these areas as it applies to cardiovascular surgery and perfusion technology.	**3 SH**
CHS 601 Introduction to Biostatistics ----- IP Course This course focuses on concepts and procedures for using descriptive and inferential statistics. Differences between parametric and non-parametric statistical tests will be emphasized. This course is predominantly an application-based course incorporating the use of computerized statistical programs such as SPSS.	**2 SH**
CVP 611 Cardiovascular Perfusion Technology I This course introduces the perfusion student to the historical development of both cardiac surgery and perfusion technology. In addition, the students will learn about the basic components of the heart lung machine and their principles of function. Students will also learn the principles of aseptic technique as practiced in the operating rooms and related departments of the hospital.	**3 SH**
CVP 612 Instrumentation in Cardiovascular Perfusion This course introduces the student to the various types of electronic monitoring equipment required for open heart surgery and related procedures. Instructional design includes didactic presentation of operational theory with practical operating room experience, simulated scenarios and laboratory study. Topics of study include electrical circuitry, pressure transducers, thermistors, cardiac output devices, fluid dynamics and physiologic monitoring devices.	**3 SH**
CVP 620 Evaluation of the Cardiac Surgery Patient This course introduces the basic diagnostic principles involved in determining the nature and extent of the disease necessitating surgical intervention. Factors that are important in determining perioperative morbidity and intraoperative perfusion management (e.g. patient medical history, laboratory results, diagnostic tests, etc.) will be discussed. Course work will include class time and observations within the clinical arena.	**3 SH**
CVP 621 Seminar I This course is designed to give students a basic understanding of medical terminology, aseptic technique, patient safety issues, professionalism and medical ethics. Students will be introduced to ethical principles often encountered in the health professions.	**3 SH**

Program of Study for Cardiovascular Perfusion First Year Spring Semester (15 SH)	Credit Hours
CVP 606 Acid Base Physiology This course provides the perfusion student with a comprehensive review of the structural, functional, and integrative aspects of the kidney and urinary system. The course will focus on theory, application, and interpretation of blood gas analysis and associated clinical cardiopulmonary physiologic mechanisms that underpin renal function. ***Pre-Requisite: CVP 605***	**2 SH**
CVP 615 Cardiovascular Perfusion Technology II This course will focus on adult cardiac and thoraco-aortic surgery. Lectures will focus on acquired adult cardiac and aortic disease states and appropriate equipment, circuits and ancillary equipment used by the perfusionist. Students will practice perfusion setups and provide presentations on current perfusion practices related to adult cardiac diseases. ***Pre-Requisite: CVP 611 & CVP 612***	**3 SH**
CVP 622 Pathophysiology and Perfusion Techniques This course is designed to provide the perfusion student with an opportunity to explore the association of anatomy, physiology and pathophysiology and the application of perfusion practice. The course will provide the detailed foundation and skills necessary to understand the interplay between the science of extracorporeal technology and the pathophysiologic considerations. Identifying and applying these principles in a systematic and integrated manner is required for evidence-based clinical practice. ***Pre-Requisite: CVP 611 & CVP 612***	**5 SH**
CVP 632 Principles of Pharmacology Students will learn the fundamental principles and concepts of pharmacology. Discussions will focus on the principles of drug absorption, distribution, and metabolism; drug receptor activities, and the therapeutic uses and mechanism of action of drugs in each major drug group. ***Pre-Requisite: CVP 620***	**3 SH**
CHS 610 Research Methods This course provides an introduction to basic, clinical, and translational research methods. It emphasizes the development of skills to enable the health science student evaluate research articles and participate in clinical research activities. Quantitative research designs, sampling techniques, measurement, and interpretation of common statistical findings are also reviewed. Principles of evidence-based practice are incorporated.	**2 SH**

Program of Study for Cardiovascular Perfusion First Year Summer Semester (14 SH)	Credit Hours
CVP 623 Adult and Pediatric Congenital Heart Disease This course introduces the student to the cardiovascular physiology, pathophysiology and anatomical differences associated with pediatric and adult congenital heart patients. Through lectures and discussion, the students will be prepared to understand these defects as well as how a Perfusionist manages the heart lung machine during these complex congenital procedures. ***Pre-Requisite: CVP 605***	**2 SH**
CVP 624 Mechanical Circulatory Support This course introduces the student to the advance practice guidelines for the care of patients treated with cardiac assist devices. Device selection based on patient issues, implantation, operation, and monitoring of various devices will be discussed. These devices, including cell savers, ventricular assist devices, extracorporeal membrane oxygenation, balloon pumps, etc. will be reviewed to give the students an understanding of the devices they will be encountering in the field. ***Pre-Requisite: CVP 622***	**2SH**
CVP 640 Principles and Practices of Cardiopulmonary Bypass with Simulation This course prepares the student for their perfusion practicum courses. The principles of extracorporeal circulation will be presented in lecture and applied during simulation and laboratory experiences. Students will prepare specific care plans for patient bypass procedures. Performance standards evaluated include: pre-bypass assessment of the patient's hemodynamics and readiness for bypass, the institution and management of cardiopulmonary bypass, anticoagulation status, system and patient monitoring, as well as procedural awareness. Each experience will conclude with a de-briefing to allow progress thru the stages of learning. ***Pre-Requisite: CVP 622***	**4 SH**
CVP 641 Perfusion Practicum I This is the first clinical rotation the student will have during their course of study. The students will continue to review the diagnostic work up procedures and apply their knowledge to develop a perfusion management plan for the patient undergoing cardiac surgery. The student will begin to assist in the operation and management plan for the patient. During this rotation students will be tested on competencies required to prepare them for perfusion practicum II through simulation, oral exams and a written exam. ***Pre-Requisite: CVP 622 & CVP 632***	**4 SH**

CVP 661 Master's Project I The purpose of this course is to provide the perfusion student with the ability to perform research. The student will be introduced to the concepts of the IRB approval process and learn how to complete a literature review, collect data, complete a statistical analysis, and write a final paper on their research as applicable to their projects. In the CVP 661-662-663 course series, students will complete a research project. ***Pre-Requisite: CHS 601 & CHS 610***	**2 SH**

Program of Study for Cardiovascular Perfusion Second Year Fall Semester (16 SH)	**Credit Hours**
CVP 662 Master's Project II The goal of this course is to integrate qualitative methods with perfusion technology knowledge and skills to test a hypothesis that addresses a current issue that is important to management of perfusion technology related to health care. ***Pre-Requisite: CHS 601 & CHS 610 & CVP 661***	**2SH**
CVP 642 Perfusion Practicum II This is the second clinical practicum experience for the student. Each course builds on the skills in the previous clinical and didactic courses. The overarching goal of the practicum series is that the student shows steady progression towards the goal of independent practice while under the watchful eye of the clinical instructor. ***Pre-Requisite: CVP 641***	**12SH**
CVP 680 Organizational Leadership The Organizational Leadership class will focus on the tools and strategies necessary to become an effective leader. While the focus will be on how these strategies can be used within a large or small perfusion group their origin is based in effective management and leadership within any organization of any size. Upon completion of this class the student will have been exposed to the leadership skills that will prepare them as a future leader in the profession.	**2SH**
Program of Study for Cardiovascular Perfusion Second Year Spring Semester (16 SH)	**Credit Hours**
CVP 664 Masters Project III This course will focus on completion of the research project for satisfaction of the graduation requirement. The student will be required to present the progress and findings of their research. ***Pre-Requisite: CHS 601 & CHS 610 & CVP 661 & CVP 662***	**2SH**
CVP 645 Perfusion Practicum III The principal goal of this final practicum experience is that the student will be capable of performing perfusion related duties supervised, but without instructor intervention. ***Pre-Requisite: CVP 641 & CVP 642***	**12SH**

CVP 681 Health Care Quality & Operations Management The Health Care Quality & Operations Management class is designed to expose the student to principles that foster continuous improvement within an organization through Continuous Quality Improvements (QCI) and Quality Assurance (QA) initiatives. QA has become a mandatory component of every profession in the business of delivering patient healthcare and it is critical that all future leaders have been exposed to these principles. Upon completion of this course the student will have a solid understanding of how to insure evidence-based medicine is being delivered. ***Pre-Requisite: CVP 680***	**2SH**
Total Hours = 78 Didactic Hours = 46 Simulation and Practicum Hours = 32	

Exam and Assignment Review Requirements

Students who receive a grade below 80% on any examination or assignment are required to schedule a mandatory review session with the instructor to review the assessment and related course material. It is the student's responsibility to seek out the instructor and schedule this meeting following the examination or assignment. Failure to complete the required review session will result in a grade of **Incomplete (I)** being assigned for the course or applicable coursework until the review has been completed. A grade of **B or better** is required for students to continue in the Cardiovascular Perfusion Program curriculum sequence. Students who receive a grade of **C or below** may be dismissed from the program in accordance with program policies.

DAYS OFF AND ABSENCES

Class and lab attendance are essential to achieve the terminal goals of the program and in many classes, attendance will be part of your grade. Attendance is mandatory, and in the unusual case of an emergency or illness the student must **notify the class instructor of their absence prior to class time** and the instructor will determine the appropriate course of action moving forward.

Observations during your first three semesters are scheduled. You are expected to make **ALL** observations. If you are sick contact the program director ***after 6AM*** on the day you are scheduled to attend through a text message or email. **If you miss a day it will be deducted from your personal days in the 4th and 5th semesters while you are on rotations**.

Clinical absences during rotations (4th and 5th semester) must be reported to the Clinical Coordinator, Dave Durdov, thru email, or a delegated person prior to the absence.

Students will be granted five clinical days off during the clinical year (4th and 5th semester) for the purpose of interviews. Students are required to notify the Clinical Coordinator at site, Dave Durdov and program director of their intention to use clinical day(s). The notification must be in writing (***email will count***) and should be done at least two weeks prior to taking the days off. In the event of emergency illnesses, students must notify the Clinical Coordinator at the site, Dave Durdov and the program director (***if this occurs on rotations***) as soon as possible of the need for day(s) off. Students MUST provide documentation of the illness as soon as possible should the illness persist greater than 48 hours. This documentation must come from an acceptable source (***a signed note from a physician***). If the student cannot provide documentation, the student will forfeit two days of clinical days off for every day that the student is absent.

Sick time will be deducted from the allotted clinical days off. If a student finds it necessary to take more than the allotted time off during the clinical semesters, they will be required to make up time during breaks or at the end of the final semester. Make-up time must be scheduled with the Clinical Coordinator in advance.

Call

Since the goal by the end of the program is for students to function fully as members of the perfusion team, on-call is an essential part of that training; thus, students may be on-call at their clinical rotations and for observation opportunities the first 3 semesters of the program.

Clinical Rotations

The Cardiovascular Perfusion Program is fortunate to have excellent clinical rotations throughout the U.S. **All students are required to rotate to some locations outside of the Chicago area and/or out of state.** All costs associated with these rotations are the responsibility of the student. Realize that each rotation will have costs associated with it, for instance housing may be more expensive in a city and some rotations will have daily parking rates for students. These costs are the responsibility of the student. In addition to the rules and guidelines set forth in this handbook, students must follow any additional rules and regulations required by the clinical affiliate.

COMPREHENSIVE PRE-CLINICAL AND END-OF-PROGRAM COMPETENCY ASSESSMENT EXAMINATION

Pre-Clinical Exam

Prior to their clinical rotations students will be administered a computer based pre-clinical exam. They must receive at least a **75%** on this exam within 3 attempts prior to the start of clinical rotations. All exams are reviewed by Rush faculty, and despite a passing score on the exam, students may be asked to repeat the exam if suspicious activity or flags are noted when taking the exam. Students failing to score 75% or greater within the 3 attempts allotted on the exam will receive remediation and retest prior to the start of the clinical rotation. Students not meeting the minimum requirement after the retest will meet with the Academic Integrity and Progress Committee to discuss the academic course of action moving forward which may include dismissal from the program.

Comprehensive Exams

Three comprehensive exams are taken during the clinical year. One is taken at the beginning of the third semester (for the student to see where their knowledge base is at and to prepare for the end of summer semester competency exam), one at the end of the third semester (where the student needs a 75% to go on rotations) and one just prior to graduation (where the student needs above an 80% to graduate). The goal of these tests are to prepare students for the national certifying exam. Each exam consists of questions like the board exams with a time limit.

Calculators will be provided to students for examinations if needed or students may bring personal calculators. NO PHONES WILL BE ALLOWED. Exams are graded and numerical scores are provided shortly after submission. The Director of Clinical Competency reviews each test and provide students with areas that need additional concentration.

CONDUCT & ETHICS

Students are always expected to conduct themselves in a professional manner - in a manner that conforms to the ethics of the health professions and instills confidence in their abilities as health care professionals. Each student is expected to conform to the professional code of ethics as outlined in their departmental student handbook.

Irresponsible, unprofessional or unethical behavior may result in disciplinary action, which may include suspension or dismissal from the college. Examples of such activity that would be grounds for dismissal include, but are not limited to, recording faculty without their permission, academic and moral dishonesty, HIPAA violations

and professionalism violations. All clinical agency or hospital regulations are to be followed by students when undergoing clinical or other training in a facility. For additional information, students should refer to the Rush University Statement on Academic Honesty and Student Conduct and the Rush University Medical Center Code of Conduct.

Professionalism: During your clinical education, you will not only refine your technical skills and expand your knowledge in clinical perfusion science, but also develop a professional demeanor that will influence both your public and private careers. The goal of this program is to foster growth in both your technical and non-technical abilities, as well as your ability to communicate effectively with the entire open-heart team. We hope these descriptions will help you understand the key areas in which you are expected to progress throughout the program.

Professionalism is a fundamental expectation of every student enrolled in the Rush University Cardiovascular Perfusion Program. Students represent themselves, the profession of perfusion, Rush University, and their clinical affiliate at all times. Professional conduct is expected in the classroom, simulation laboratory, clinical environment, public settings, and all forms of electronic communication.

Attitude: In order to perform well, you must feel good about the work that we do. Your attitude is reflected in the amount of sincere interest and enthusiasm you outwardly express for your job responsibilities, including both assigned and unassigned tasks.

Attendance/Punctuality: To support consistent performance and maintain a professional learning environment, students are expected to arrive early and be prepared to begin all clinical or classroom activities on time. Late arrivals disrupt the learning process, may result in missed educational experiences, and will not be repeated or made up. Points may be deducted from your grade for tardiness, and consequences for lateness will be determined at the instructor's discretion. If you must be absent or leave early, you are required to notify your instructor in advance and ensure all assignments or responsibilities are completed prior to your departure.

Dependability: As a perfusionist, both physicians and patients rely on you to deliver services with precision and efficiency. In the clinical environment, a patient's life may depend on your ability to meet on-call responsibilities and to arrive early—remember, "on time" is considered late—for all clinical experiences. This same commitment to

punctuality and preparedness is expected in the classroom, as it reflects the professionalism required in your future career.

Organization: To complete the workload efficiently, perfusionists plan, prioritize tasks and are organized. Perfusionists give reports to relay important information about the patient so another Perfusionist can complete the procedures should an emergency arise. In addition, perfusionists will have tasks outside the OR including, but not limited to quality controls, cleaning, working on projects, developing protocols, etc.

Attention to Detail: Patient lives depend on you performing your tasks accurately and following all standard operating procedures and protocols. You must follow all safety procedures, perform preventative maintenance regularly, record data correctly and run quality controls. You will be continually working to meet deadlines and completing your assigned workload. Your classroom work prepares you for meeting the expectations during clinical rotations, observations and in practice after graduation.

Error Recognition and Correction: Perfusionists rely on their technical expertise to recognize and correct mistakes. This is accomplished by reviewing check lists, verifying equipment set-up and performance prior to patient contact and ensuring the appropriate equipment is available. You are compelled to possess the integrity to report errors to the appropriate official in the best interest of patient care. It's important that you're able to receive constructive criticism and feedback to improve in a positive manner.

Interpersonal Skills: Part of being a professional is getting along well and communicating effectively despite personal differences. As perfusionists, you will work with other health care professionals and patients. It is essential that you function cooperatively as members of the health care team. Personality conflicts must not prevent you from putting forth your best efforts.

Self-confidence: The workload is completed more smoothly if you approach it with self-confidence, by organizing your individual tasks, by interacting with your peers and by maintaining your composure during times of stress. At times you must accept some constructive criticism and modify your behavior.

Problem Solving: Not all workloads can be completed without problems occurring. You must always keep your mind on what is happening so that you can perceive any errors or equipment malfunction and then take corrective actions. To do this, you must know the purpose of each step and comprehend the consequences of deviating from the daily

operating procedures of a procedure and all equipment in use.

Compliance with Rules and Regulations: As professionals you are compelled to understand the necessity and significance of rules and regulations. Generally, they are formulated for the benefit of all: our patients, our colleagues, and ourselves. Their purpose may involve safety, accuracy, efficiency and/or factors important to the welfare of patients and staff. Adherence to rules and regulations is expected of professionals.

Social Media and Electronic Communication

Students are personally responsible for all information they publish or share electronically. Professional standards apply equally to personal and professional social media accounts and electronic communications.

Students shall **never**:

- Photograph or record patients, operating rooms, clinical equipment, monitors, medical records, or restricted clinical areas without written institutional authorization.
- Post, discuss, or share patient information, clinical cases, photographs, videos, or protected health information in any public or private online forum.
- Post comments, photographs, or videos that could identify a patient, clinical affiliate, Rush University, faculty, staff, physicians, or fellow students without authorization.
- Publish content that is defamatory, discriminatory, harassing, threatening, obscene, or otherwise inconsistent with professional standards.
- Use social media to complain about, ridicule, or criticize patients, coworkers, faculty, clinical sites, or clinical experiences.
- Represent personal opinions as those of Rush University or any clinical affiliate.

Electronic communications, including email, text messages, and messaging applications, must remain professional, respectful, and appropriate at all times.

Students should recognize that online content may become permanent, searchable, discoverable in legal proceedings, and subject to review by employers, licensing boards, Rush University, or clinical affiliates.

Professional Conduct Violations

Professionalism concerns will be addressed according to the severity and frequency of the behavior. Depending on the circumstances, disciplinary action may include verbal counseling, written documentation, a remediation plan and/or Clinical Training Action Plan, removal from the clinical site, course failure, academic probation, or dismissal from the Cardiovascular Perfusion Program.

Serious violations involving patient safety, dishonesty, breaches of confidentiality, harassment, discrimination, falsification of records, or conduct that jeopardizes the reputation of Rush University or a clinical affiliate may result in immediate removal from the clinical site and dismissal from the program.

ACADEMIC DISHONESTY

Academic dishonesty in the Cardiovascular Perfusion Program is defined as any act that compromises the integrity of the educational process, patient care records, or professional conduct. Examples include, but are not limited to:

Unauthorized possession of academic materials – Possessing, copying, photographing, or otherwise obtaining materials used by faculty to determine a grade (e.g., examinations, quizzes, study questions, answer keys) without explicit permission. Each faculty member will define what constitutes “authorized” materials and will communicate these guidelines to students.

Use of unauthorized aids during an examination: Using notes, electronic devices, calculators, or any resource not explicitly permitted by the instructor.

Providing unauthorized assistance during an examination: Helping another student in any way that has not been approved by the instructor, including sharing answers or signaling.

Requesting unauthorized assistance during an examination: Asking another student for help during a test, quiz, or graded activity without instructor approval.

Dishonesty in perfusion/patient records: Any falsification, alteration, or misrepresentation of patient records, clinical documentation, or data related to perfusion procedures.

Plagiarism: Presenting someone else’s work, ideas, or words as your own without proper citation, regardless of whether the source is published, unpublished, digital, or oral.

Deliberate deception: Any intentional act of misrepresentation or fraud in academic or clinical settings, including falsifying attendance, altering grades, or misrepresenting your role in a clinical case.

Submitting non-original work: All assignments, projects, and case reports must be your own original work. Submitting work produced by another individual, generated by unauthorized means, or previously submitted in another course without prior faculty approval constitutes plagiarism.

Consequences: Violations of this policy may result in disciplinary action up to and including failure of the assignment, failure of the course, removal from the clinical site, or dismissal from the program, in accordance with university and program policies. The correct action will be determined by the Academic Integrity and Progress Council.

PLAGIARISM

Any work written by another person, quoted or not, must be cited. Refer to Instructions for Authors in The Journal of Extracorporeal Technology for proper citation format or an alternate referencing style.

Plagiarism is a serious academic offense and can be grounds for dismissal from the Cardiovascular Perfusion program. The correct action will be determined by the Academic Integrity and Progress Council.

EXAMINATION ADMINISTRATION

All examinations given by the department will be monitored by faculty or staff at all times. Students will be seated in such a manner as to minimize the opportunity for observation of other students' examination papers. No breaks will be allowed once an examination period has begun, and students may not leave the room during an exam until they are finished taking the examination, except in the event of an emergency, which will be judged by the faculty or staff monitoring the exam on a case-by-case basis.

If a student turns in an examination without answering all questions, he or she will NOT be given an opportunity to finish the examination after leaving the room.

Calculators will be provided to students for examinations if needed or students may bring personal calculators. NO PHONES WILL BE ALLOWED.

EXAMINATION REVIEW

At the discretion of the course instructor, during review of any examination given within the curriculum, no other papers or books will be allowed on the student's desk. No writing implements of any kind will be allowed. NO note taking or recording of any kind will be permitted. This includes written note taking, and/or recording with audiotape,

videotape, or any other form of electronic or mechanical recording. Violation of this policy will constitute academic dishonesty, will be discussed by the Academic Integrity and Progress Committee and will then be referred to the Committee on Progress and Promotions for review and possible disciplinary action.

COLLEGE OF HEALTH SCIENCES/ CARDIOVASCULAR PERFUSION PROGRAM STUDENT ACADEMIC APPEAL AND GRIEVANCE PROCEDURES

The College of Health Sciences student appeals and grievance procedures provide a mechanism allowing students to obtain a review of a complaint of unfair treatment. The student appeals procedures shall not be used to question a rule, procedure or policy established by an authorized faculty or administrative body. Rather, it shall be used to provide due process for those who believe that a rule, procedure or policy has been applied in an unfair or inequitable manner, or that there has been unfair or improper treatment by a person or persons.

Students who are appealing an academic decision that could result in a dismissal from the University may be allowed to continue to progress in the program until the issue is resolved. If the academic decision is upheld and the student is dismissed from the University, they will be withdrawn from their current classes.

This withdrawal will be backdated to before the beginning of the term, and the student will receive 100 percent tuition reimbursement for that term.

A student wishing to appeal an academic decision should follow the process summarized below in the sequence indicated:

Step 1. In the academic community, the responsibility for course development, course delivery and the assessment of student achievement rests primarily with each course instructor. Any student who has a complaint of inappropriate treatment related to a course should first seek to resolve it informally with the course instructor. If the course instructor is the department chairperson or if the complaint does not pertain to a specific course, the student should seek resolution with the department chairperson at the outset.

1. A student with such a complaint must request reconsideration, in writing, of the application of a rule, procedure or policy, or unfair or improper treatment within five working days following the incident that forms the basis for the complaint (e.g., five days after grades are posted).
2. The instructor will meet with the student or speak with the student via telephone

for those students who are unable to come to the chairperson's office, if so requested by the student. The instructor will notify the student in writing of the decision regarding the complaint within five working days following the meeting or discussion.

Step 2. If resolution is not achieved informally, as described in Step 1, the student should seek resolution with the chairperson of the department in which the course is offered within five working days following notification by the instructor of their decision.

1. The chairperson will meet with the student - or speak with the student via telephone for those students unable to come to the chairperson's office if so requested by the student - following receipt of the student's request for resolution to discuss the problem or complaint.
2. The chairperson will notify the student of their decision in writing following the meeting or discussion.

Step 3. If the issue was not resolved in Step 2, the student may submit a written appeal, describing the nature of the student's complaint and reasons for seeking an appeal, to the student progress and promotion committee of the department within five working days following notification by the department chairperson of their decision.

1. The student may appear before the committee in person, make an oral statement and answer questions from the committee. The student will not be allowed to be present during committee deliberations.
2. The committee may request that the course instructor or faculty member named in the grievance appear before the committee to make an oral statement and answer questions. The instructor or faculty member named in the grievance may not be present during committee deliberations.
3. Following review of information provided; the committee will notify the student of its decision.

Step 4. If the issue was not resolved to the student's satisfaction in Step 3, the student may submit a written request seeking a hearing to the dean within five working days of receiving the department progress and promotion committee decision. The written request should include a description of the complaint and the reason the student is seeking an appeal.

1. The dean will meet with the student for a hearing following receipt of the written request from them.
2. Following the meeting with the student, the dean may render a decision or

choose to appoint a panel to investigate the grievance and make a recommendation to the dean.

Following review of the information provided and any recommendations from the panel, should one be appointed, the dean will then notify the student of their decision. The decision of the dean shall be final.

CONDUCT IN CLINICAL FACILITIES

Procedure for Student Disciplinary Issues in Clinical or Observation Settings

In the event of a student disciplinary problem in any clinical facility or observation setting, including but not limited to unprofessional conduct, the following procedure will be followed:

Immediate Dismissal from facility: The student will be dismissed from the clinical or observation facility by the instructor or designated preceptor. This time will be recorded as an unexcused absence.

Mandatory Counseling Session: The student will be scheduled for a formal counseling session with the instructor and the Clinical Coordinator and program director from the CVP program. During this meeting, the student's clinical or observation status will be reviewed, and appropriate action will be determined. The student must complete this counseling session before being readmitted to any clinical or observation rotation.

Attendance Policy Enforcement: The program's attendance policy applies in all such cases, and any absences resulting from dismissal will be subject to its terms.

RUSH UNIVERSITY – CARDIOVASCULAR PERFUSION PROGRAM COLLEGE OF HEALTH SCIENCES: HIPAA AND PATIENT PRIVACY

The Cardiovascular Perfusion Program at Rush takes HIPAA and the privacy of our patients very seriously. Students are expected to actively apply and enforce these protections during all program activities. This applies not only to clinical rotations, but also to homework activities, OR observations, and research projects. Both students and clinical affiliates are encouraged to express any questions or concerns to the program's Clinical Coordinator or Program Director.

The official policy of the Rush College of Health Sciences is stated below:

"As a student at Rush University, you have a legal and ethical responsibility to safeguard the privacy of all patients and protect confidentiality and security of all health information. Protecting the confidentiality of patient information means protecting it from

unauthorized use or disclosure in any format - verbal, fax, written or electronic/computer. Patient confidentiality is a central obligation of patient care. Any breaches in patient confidentiality or privacy may result in disciplinary action, up to and including dismissal from the college."

The laboratory component of some courses may use students as simulated patients. This is particularly true for the patient evaluation, medicine and patient education components. Additionally, the sharing of personal experiences can be a rich resource in the development of students understanding, knowledge and appreciation of disease, health care and impact on peoples' lives.

Practicing medical history and physical examination places students in close contact and leads to the sharing of personal information and physical findings. Similarly, students may use personal experiences in patient role-playing exercises.

All shared and personal medical information and physical examination findings are to be treated with utmost confidentiality, the same as for any patient contact. Failure to protect the confidentiality of any information related to the activities in a course or clinical rotation may result in disciplinary action, up to and including suspension or dismissal from the college.

For additional information, students should refer to the Rush University HIPAA policy and the Rush University Policy on Privacy and Confidentiality of Student Records and FERPA.

GUIDE TO PROFESSIONAL CONDUCT
(SEE APPENDIX B)

Communication Boundaries and Confidentiality
To maintain compliance with the Family Educational Rights and Privacy Act (FERPA) and uphold professional standards, faculty and staff are unable to discuss a student's academic progress, conduct, or standing with parents, family members, or other third parties without the student's written consent. All communications regarding coursework, scheduling, and program matters must be conducted directly between the student and the program.

Distribution of Program Communications
Meeting invitations, program announcements, and emails sent by faculty or staff are

considered confidential and are intended solely for the enrolled students to whom they are addressed. Students may not forward, share, post, or otherwise distribute these communications without prior approval from the originating faculty member or program director. Unauthorized sharing of program communications is considered a breach of professional conduct and may result in disciplinary action.

Procedure for Unprofessional Conduct

The following guidelines will be followed for unprofessional conduct:

Step 1. The student will have been identified as violating an established standard of professional conduct/judgment or moral/ethical behavior, and the department chair or program director will have been notified.

Step 2. The department chairperson or program director will meet with the individual(s) making the allegation and the student's faculty advisor to review the available information and determine the veracity of the allegations.

Step 3. The department chairperson, student and faculty advisor, whenever possible, will meet as promptly as possible after the alleged incident. The department chair will report to the student the facts and available information and will seek to authenticate or clarify the allegations where possible. If it is determined that there is no basis for the allegation, no further action will be taken.

Step 4. If it is determined that there is a basis for the allegation and that further investigation is necessary, then the student will meet with the Academic Integrity and Progress Council and then a preliminary hearing of the departmental Committee of Progress and Promotions will be convened to review the allegations and recommend a course of action. The department chair will inform the student and the dean in writing of the preliminary hearing and the following:

1. Date
2. Name of student
3. Nature of the allegations
4. Date of alleged incident/occurrence
5. Professional attributes that allegedly violate standards: skill, behavior, judgment, ethical values, etc.

Incidents in the Clinical Agency

An incident occurring which affects patient or staff well-being, or the patient's prescribed care will be reported to the clinical instructor immediately. A hospital incident report will then be completed following the policy of that institution. A duplicate of the hospital incident report as well as a memorandum of explanation from the clinical instructor will be placed in the student's clinical file and the department chair/program director or Director of Clinical Education will be notified immediately. Incidents involving gross errors in judgment or practice on the part of the student will constitute grounds for dismissal from the program.

Procedure for Readmission to the Cardiovascular Perfusion Program

Any student who has withdrawn from the program, has not been enrolled for one or more semesters, or has been dismissed may apply for readmission by submitting a new application through the standard admissions process. Re-entering students must meet all conditions outlined in their dismissal or re-entry acceptance letter, as well as all policies, requirements, and course sequences in effect at the time of re-entry. Previously enrolled students will be considered alongside the pool of new applicants and are not guaranteed admission. Tuition and fees will be charged at the rates in effect at the time of re-enrollment.

Change of Address Responsibility

It is the responsibility of any student enrolled in the Cardiovascular Perfusion Program to inform both the Office of the Registrar and the department of any change of address or phone number.

Correspondence between Students and Faculty

1. A schedule of office hours will be noted in each faculty member's course syllabus.
2. Students will be assigned to a faculty advisor in the fall semester of their first year. Students are required to set up and meet with their advisor each semester. It is the responsibility of the student to meet with the advisor.
3. Each student must meet with his advisor formally at least once per semester during the academic year but may do so more frequently if warranted.
4. A student conference record will be completed and signed by both the faculty member and student following a formal conference or through email verification when necessary.

Release of Student Information

Students must sign a release form requesting letters of reference for employment, enrollment verification, etc. Additional forms are available in the Department.

Student grades cannot be given out over the telephone.

Professional Appearance and Attire Policy

1. **Professional Attire and Identification**
    - Professional attire and appearance are required at all times in the classroom, clinical settings, and during any official program activities.
    - Students must have **one white lab coat with the RUSH logo** and must display their **RUSH University identification badge** at all times while on campus or in a clinical facility.
    - If a facility requires its own identification badge, students must follow that facility's policy and wear the facility-issued ID in place of the RUSH badge while on site.
2. **Appropriate Coverage and Style**
    - The trunk region (midriff) must remain covered at all times, including in classrooms, clinical settings, and anywhere on the RUSH University campus.
    - Clothing should be professional in style and fabric. Examples of **inappropriate attire** include, but are not limited to: sequins, leather leggings, tops with cut-out shoulders, distressed or ripped clothing, excessively tight or revealing garments, and any clothing with offensive language or graphics.
3. **Clinical Attire**
    - Clinical attire refers to clothing worn during clinical work or when visiting clinical sites for observation. Students are responsible for contacting their clinical instructor **in advance** to confirm site-specific dress requirements (e.g., lab coats, scrubs, specific footwear).
    - All clothing must be clean, in good repair, and meet infection control standards when applicable.
    - **Long nails, fake nails, flaking nail polish and jewelry may not be worn in a hospital setting as they are an infection risk.**

4. **Non-Compliance and Consequences**

- Failure to comply with the dress code will result in a verbal warning for the first offense and a written warning for the second offense.
- Continued violations will result in a meeting with the **Academic Integrity and Progress Council** and may lead to dismissal from the program.

5. **Cell Phones, Smart Watches and Pagers**

- Due to their disruptive nature, all cell phones and pagers must be **turned off or placed on silent/quiet mode** during class periods, examinations, clinical hours, and patient care activities.
- The use of personal electronic devices during these times is prohibited unless expressly authorized by the instructor or clinical preceptor.

CARDIOVASCULAR PERFUSION PROGRAM RUSH UNIVERSITY BACKGROUND TO CLINICAL EDUCATION

The Perfusion Practicum (PP) courses represent the clinical portion of the Cardiovascular Perfusion Program at Rush University. The course series starts in the summer semester preceding the second year and continues until graduation at the end of spring semester. Students engage in coursework that offers an ongoing three phase approach of (1) content knowledge, (2) clinical experience, and (3) seminar application. Thus, students are "experiencing" learning within a safe and supportive environment. Students gain valuable skill and expertise with the guidance of skilled practitioner faculty. In these courses, the students obtain clinical experience and competencies in all aspects of cardiovascular perfusion. Each clinical course builds on the skills developed in previous clinical and didactic courses. The principal goal of the final perfusion practicum is that the student will be capable of performing all perfusion related duties supervised, but without instructor intervention.

Philosophy of Clinical Education

The Cardiovascular Perfusion Program's objective is to help students acquire the knowledge and skills of their discipline through the in-depth academic content, sequential structured clinical education experiences and learning assignments. The clinical education component is viewed as a dynamic process where students participate actively in learning to apply academic information to clinical practice. The goal of all learning

experiences is to instill a commitment to lifelong learning as a means by which graduates of the program can deal with and influence the direction of change in the profession.

Student Role in Clinical Education

During the transition from didactic education to the primary phase of clinical education it is important for all students to understand that they are responsible for their own learning. The Perfusion faculty and staff are here to facilitate successful completion of all degree, clinical, and professional requirements. In clinical education, students must focus on understanding why and how, ask questions of their clinical instructors, and incorporate content from didactic courses to clinical practice. Students need to refine their self-evaluation skills, so they have heightened awareness of what they know, what they don't know, and strategies for obtaining information and developing clinical skills needed. The goal should be to acquire the knowledge and skills to enable independent and successful entry level practitioner in the science of cardiovascular perfusion. When having difficulties transitioning from the classroom to the focus of clinical practice, it is imperative to immediately contact the appropriate clinical coordinator to discuss the concerns. Early discussion can prevent later difficulties. Students are also encouraged to communicate with their academic advisors regarding any aspect of their clinical experiences.

Development & Measurement of Clinical Skills

The basic areas of clinical education focus on facilitating the acquisition of knowledge, skills, and professional attributes needed for professional practice. While participating in clinical practicums, students gain valuable skills and expertise with the guidance of accomplished practitioner faculty. The primary focus is on patient safety and quality of care. See ***(Appendix A)*** for the established standards used to assess clinical skills demonstrated during the clinical experience courses. It is imperative to understand there is no mechanism for remediation for failure of the clinical courses. Students who fail to receive a passing grade on any of the Perfusion Practicum courses (Clinical Rotations) may be dismissed from the program. The responsibility for final grades for all perfusion practicum courses lies with the Program Director and Clinical Coordinator of the perfusion program. Failure to meet competency levels may result in failure of the entire course. Failure to complete a clinical rotation because of dismissal from the site for

clinical incompetency, unprofessional behavior, or any other reason constitutes failure of that clinical rotation. Students who fail to complete a rotation, may, at the discretion of the course director and program director, be required to complete a rotation at a different site of the director's choosing and site availability to accept another student. This site may be an out of town site. If a student fails to complete a rotation, that student will, at a minimum, be placed on academic probation up to dismissal from the program pending the end of rotation evaluation.

Formative Assessment of Clinical Competency

In addition to documentation of hours and case summaries, daily evaluations will be completed and managed thru Medatrax (an advanced medical education informatics and data tracking system). A mandatory Medatrax in-service will be provided to students prior to rotations. Additionally, assessment measures will be completed at midterm and end of term for each of the perfusion practicum courses. Mid-term grading provides a mechanism for identifying student strengths and areas to improve. They also provide a structure for setting up learning goals for the remainder of the term. A student's actual grade for the term is based on performance at the end of the rotation as measured across the last 4-5 weeks. Students receiving a failing grade at the mid-term evaluation will be required to develop a clinical remediation plan with the clinical coordinator at the site to help the student work towards improving areas of concern. The remediation plan must be submitted to the program's clinical coordinator for final approval. Students wishing to appeal the failure of a Perfusion Practicum series course should follow the policy for course appeals.

Social Media & Professional Considerations

Students WILL NOT post any comments or pictures related to clinical education activities on social media sites or any other public communication venues. Pictures involving patients or patient care are a direct violation of HIPAA. HIPAA guidelines must be followed at all times and patients should never be discussed in public arenas. Note that potential employers often search social media sites prior to hiring an employee. A student's professionalism may be judged by others from social media activity. When participating in clinical education one should not access or post on social media sites. For more information please review Rush University's Social Media Policy.

TECHNOLOGY SUPPORT RESOURCES:

Technical Support at Rush

- Message **D&IS Service Desk** Live Chat via Teams
- Phone: (312) 563-2527

Canvas Support and Technical Support at Rush

- Chat with Canvas support directly
- Phone: (312) 563-2527

STUDENT EMPLOYMENT DURING THE PROGRAM

The following guidelines apply to students holding outside jobs while in the program:

- The program maintains an intense curriculum that demands a great deal of time, effort, and energy. At the same time, it is important that students remain well balanced and allow enough time for social activities, recreation, and rest. Students are advised that outside employment may adversely affect their ability to perform at a high academic standard. Students may seek outside employment during the first three semesters of the training program but must not allow their employment activities to negatively impact their academic standings.
- Beginning the first semester in the program, students will begin observations and there will be weekend labs and open lab times.
- The requirements of the rotations the 4th and 5th semester and the variability of both the hours and location of the rotations prohibit students' working during their second year.
- Students are not paid for the tasks they perform while on clinical rotations.
- While on clinical rotations, students may not provide services within the preceptor's practice apart from those rendered for their educational value as part of the clinical instruction experience. Students may not receive monetary compensation for work performed within the preceptor's practice.

IMMUNIZATIONS AND TUBERCULOSIS TESTING

Proof of Immunity under Public Act 85-1315, Illinois College and University Immunity Requirement, stipulates that all students born after December 31, 1956 must show proof of immunity. While documentation of this information for compliance with state

regulations is not mandatory for students who were born before 1/1/57, most colleges and programs at Rush have individual immunization requirements for their students. Program immunization requirements are mandatory for all students in those programs regardless of age.

- **Measles (Rubeola), Mumps, Rubella –** positive titers
- **Varicella –** positive titers
- **Hepatitis B –** immunization record and positive titers
- **Tetanus/Diphtheria –** booster within the last 10 years
- **Tuberculosis –** two-step PPD Mantoux Skin Test or the Quantiferon-TB Gold test with negative results
- **Meningococcal –** immunization record of one dose of meningococcal conjugate on or after the age of 16
- **Influenza –** each flu season, during the duration of the program
- **COVID-19** - Effective October 17, 2023, in alignment with the RUSH System for Health, RUSH University no longer requires the COVID-19 vaccine for students. The COVID-19 vaccine continues to be strongly recommended.

PROFESSIONAL LIABILITY INSURANCE COVERAGE

All entering students are required to be covered by health insurance while attending Rush University. If you don't have other comparable coverage, and provided you are enrolled in a degree program at the University, you can sign up for insurance offered by Academic Health Plans. This Preferred Provider Plan (PPO) allows you to choose from a large number of primary care physicians who are members of the plan.

If you have other health insurance, you must provide proof of coverage and verify that information annually, before registration for the fall term, through the Academic HealthPlans website Rush University - College of Health Sciences | Home (myahpcare.com)

ILLNESS OR INJURY OF STUDENT WHILE ATTENDING CLASSES

Illness or injury while in the classroom or clinical area MUST be reported to the professor or instructor present and program director. Injuries while on clinical rotations MUST be immediately reported to the clinical coordinator and program director. Students who are pregnant should inform the clinical director and program director who will inform the instructor so that no assignment will be made involving exposure to radiation or other hazards.

USE OF HOSPITAL LIBRARIES

Use of hospital libraries varies according to agency policy. Check with current clinical instructor about the procedure needed.

RUSH UNIVERSITY MEDICAL CENTER HUMAN RESOURCES POLICIES & PROCEDURES

On occasion students will request to be excused from clinical activities. This policy is regarding the request for temporary time away from the area of patient care due to an emergency rather than a request for time off. The policy below outlines the Rush University Medical Center's guidelines for these types of situations. Clinical affiliates are encouraged to touch base with the Clinical Coordinator or Program Director if any applicable scenario presents itself in order to assess each on a case-by-case basis. However, this policy sets the framework for the appropriate course of action. Of note – the highlight of the policy is that patient care must come first. The student is expected to continue to perform all clinical duties until an accommodation, reassignment, or appropriate course of action is determined.

Staff Rights Policy

The Medical Center respects its staff members' cultural values, ethics and religious beliefs and the impact these may have on patient care. To ensure that patient care and treatment will not suffer if the hospital excuses staff members from participating in an aspect of care, the hospital establishes alternative methods of care delivery for these situations.

The aspects of care which are covered by this policy indicate any particular form of medical care which is contrary to the conscience of an employee or staff member, including but not limited to abortion, sterilization, and/or Do Not Resuscitate (DNR) status.

10.1 It is the employee's responsibility to notify his/her supervisor in a timely manner if there is any conflict or concern in their providing an aspect of patient care.

10.2 It is the supervisor's responsibility to determine whether the employee's request may be reasonably accommodated in a manner which does not jeopardize patient care.

10.3 Each situation will be evaluated in relation to maintaining continuous, effective patient care. In the event the requested accommodation is not reasonable, a transfer or a change in responsibility may result.

10.4 In either event, the employee may be responsible for providing appropriate patient care until a reassignment can be made.

10.5 Any questions regarding this policy should be directed to the Employee Relations department.

The policies and procedures contained in this manual are intended as a guide only. They do not constitute any enforceable promise and do not alter employment at-will. Managers and employees should seek guidance from Human Resources for clarification.

RUSH UNIVERSITY POLICIES AND PROCEDURES

Additional information on all of Rush University's Policies and Procedures can be found via the following link:

Rush University College of Health Science's Policies and Procedures

RUSH UNIVERSITY POLICIES AND PROCEDURES FOR STUDENTS WITH DISABILITIES

For information or to request accommodation, please contact your college representative listed below. Please do not make requests for accommodation to individual faculty members, lecturers or course directors.

In keeping with its goals to promote diversity among its student population, Rush University is committed to attracting and education students who will help to make the population of health care professionals' representative of the national population, including students with disabilities. In addition, Rush University wishes to ensure that access to its facilities, programs and services are available to all students on a nondiscriminatory basis consistent with legal requirements as outlined in the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973. A reasonable accommodation is a modification or adjustment to an instructional activity, facility, program or service that enables a qualified student with a disability to have an equal opportunity to participate in all Rush University student activities. To be eligible for accommodation, a student must have a documented disability as defined by the ADA and section 504 of the rehabilitation Act of 1973. Both the ADA and section 504 define disability as (a) a physical or mental impairment that substantially limits one or more major life activities of such an individual; (b) a record of such impairment; or (c) being regarded as having such a condition.

Students should contact **Office of Student Accesibility Services** at Rush University, to engage in a confidential conversation about the process for requesting reasonable

accommodations in the classroom and clinical settings.

Accommodations are not provided retroactively at the University. Additional information can be found online at the Office of Student Disability website or by contacting the Office of Student Disability Services. In order to respect students' privacy and ensure a thoughtful interactive discussion, students should not make accommodation requests to individual faculty members, lecturers, or course directors; instead, please contact:

Marie Lusk is the contact for students and faculty in the following colleges/programs: **College of Health Sciences:** Audiology, Cardiovascular Perfusion, Clinical Nutrition, Diagnostic Medical Sonography, Imaging Sciences, Respiratory Care, Speech-Language Pathology	**Book a Meeting with Marie Lusk**

Email: StudentAccessibility@rush.edu

Website: https://www.rushu.rush.edu/office-student-accessibility-services

Center for Clinical Wellness

Triangle Office Building, Suite 150
1700 Van Buren Street
Monday-Friday
7:00 a.m. - 7:00 p.m.
Schedule an appointment (Rush login required)

https://www.rushu.rush.edu/student-life/student-affairs/center-clinical-wellness

The Center for Clinical Wellness is a hub for all things wellness at Rush and is available to all current members of our community including students, house staff, clinicians and non-clinical employees at Rush University Medical Center, Rush Oak Park Hospital, and Rush Copley Medical Center. Made possible by a significant philanthropic gift, the center represents a new chapter in well-being for Rush University System for Health. Each finish, color and texture was selected with a scientifically-proven rationale to improve the well-being of visitors, while creating an optimal healing environment.

The center, which provides a network of on-site and virtual tools as part of an overarching wellness eco-system-including free counseling, coaching and other services-the center seeks to addresses three primary goals: creation of a culture of wellness, increased support for mental health and the production of leading research through an emphasis on data and analytics. The center seeks innovative solutions to address burnout, improve resilience and enhance joy in work.

For additional specifics-including scheduling, location, hours and program offerings-please visit the Center for Clinical Wellness webpage at https://insiderush.rush.edu/wellness

RUSH UNIVERSITY STUDENT COMPLAINT POLICY :

University Student Complaint Policy

Title	University Student Complaint
Policy Number	UAD0023
Policy Type	University
Category	Administrative
Subcategory 1	
Subcategory 2	
Subcategory 3	
Approval Date	2/19/2019
Contact	Gayle B. Ward, JD Vice Provost Division of Student Affairs Brenda L. Weddington Chief Enrollment Management Officer Division of Student Affairs
Applies To	Rush University Students
Purpose	Rush University embraces a philosophy of respect and accountability as supported by the ICARE values (Innovation, Collaboration, Accountability, Respect and Excellence). Rooted in these ICARE values, the Student Complaint Policies and Procedures are meant to balance a supportive and equitable process to assist students with submitting complaints. According to the Higher Learning Commission Institutional Records of Student Complaints (HLC, 2018), *"An institution shall make available an account of the student complaints it has received, its processing of those complaints, and how that processing comports with the institution's policies and procedures on the handling of grievances or complaints."* To this end, the University strives to provide a seamless complaint process experience by making available to the student body a convenient online complaint submission process and a toll-free hotline phone number

through the NAVEX Global Sudent Complaint Portal* (hereafter “Student Complaint Portal”). The Student Complaint Portal and Hotline offers students a confidential as well as an anonymous mechanism to submit their complaints.

The University’s Student Complaint Policies and Procedures should:

1. Provide clear instructions on how to submit a formal student complaint;
2. Distinguish the various types of student complaints, (i.e., examples of academic versus non-academic complaints)
3. Provide a list of external agencies to report student complaints.

***NAVEX Global is a third-party hosted resource with secured servers and is not hosted by Rush University.**

Executive Summary

Definitions

Definition of Terms

Academic Violation: Any form of academic dishonesty that violates ethical principles of the academic community that may include instances of cheating, fabrication, or plagiarism.

Chair: chief administrative officer of an academic program or department.

Complainant: student who files a complaint.

Dean: chief administrative officer of a college.

Disruptive Conduct/Behavior: Inappropriate conduct or behavior on university premises or at offsite affiliates location that interrupts learning or interferes with the activities of others and is not conducive to the learning environment.

External accrediting and regulating agencies: Agencies that set higher education standards and issue accreditation and authorization for Rush University to offer all degree programs and specializations.

Faculty/Instructor: any person authorized by appointment to teach courses offered at the university or involved in a capacity to assess or evaluate student’s academic or scholarly work.

Formal Complaint Process: A written documented complaint submitted either through the Student Complaint Portal or through another formal process for review and adjudication for resolution.

Grade Appeals: A formal process by which a student may dispute the final grade received in a particular course that was unable to be resolved in consultation with the faculty of record.

Informal Complaint Process: The process to informally meet with all parties involved in the complaint to come to a mutual understanding and decision to successfully resolve the issue(s).

Provost: University Chief Academic Officer

Respondent: person(s) against whom the complaint was filed

Student: any person actively enrolled in Rush University in a course offered for credit.

Student Complaint Portal: The Rush University Complaint Portal is used to report and track student complaints.

Title IX: The Higher Education Amendments of 1972, which prohibits discrimination on the basis of sex in educational programs or activities, admission and employment.

- **Sexual Harassment**: Unwelcomed sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature.
- **Sexual Misconduct**: Sexual violence including sexual assault, incapacitation for sexual purposes, sexual exploitation, relationship violence, and in some instances, sexual harassment.
- **Sex Discrimination**: Unjust or prejudicial treatment of an individual based on their race, color, religion, national origin, creed, age and/or disability as defined by Section 504 of the Rehabilitation.

Equipment Information Policy

Policy Statement

Rush University endeavors to provide an environment where student concerns are addressed and resolved in a manner that fosters both respect and equality. The University encourages students to seek informal and formal procedures to allow students the flexibility to adjudicate their complaints, depending on the nature or seriousness of the complaint(s). No retaliation or reprisal shall be tolerated against a student for submitting, in good faith, a complaint either on an informal or formal basis.

All student complaint submissions will be kept confidential to the extent possible to provide thorough investigations, maintain campus safety and to

ensure compliance with federal, state or local policies. Submission of complaints through the Student Complaint Portal are not meant to override any existing policies or procedures such as grade appeals, student professionalism code of conduct, Title IX, Discrimination and Harassment or any policy established by law or the university. The Student Complaint Portal is designed to work interdependently with existing student policies and procedures. Students are encouraged to file their complaint as soon as possible to ensure that all practical information is collected and available to resolve and improve the student's experience.

Student Complaint Portal:

- When a student files a complaint through the Student Complaint Portal or through the Student Complaint toll-free call center, the student will receive a unique user name and are asked to choose a password. Please see link to the Student Complaint portal Student Complaint Portal.
- Students can return to the Student Complaint Portal again either by internet or telephone and access the original report to add more detail or answer questions posed by a university representative to further help resolve any open issues.
- Once a complaint is filed through the Student Complaint Portal, the University will review or refer the complaint to determine the appropriate follow-up. *At all times, the complaint will be kept confidential to the extent possible to allow for proper investigation.* Only individuals with legitimate reasons will have access to the filed complaint.
- If the student complaint is required to be referred to a specific contact person or process (i.e., Title IX or Grade Appeals), the student will be notified that the complaint has been referred to the appropriate area for further review and the complaint will be facilitated through that specific process. However, the student complaint ticket will remain open until the complaint has been finalized and closed.
- If a decision is not rendered after progressing through the appropriate steps, leadership of the specific area will be notified for additional review unless an existing policy dictates a different course of action.
- Students also have the right to file a formal complaint with external accrediting or regulating agencies affiliated with Rush University if they believe that this matter was not resolved in earnest. Links to these accrediting and regulatory agencies are listed in this policy.
- A submission of a formal student complaint can be anonymous or non-anonymous. Anonymous complaints will be investigated to the degree that the institution has enough information to proceed with an investigation.

- All non-anonymous complaints should contain the following information:
    - The student complainant should include his/or her name, student identification number, contact information, including telephone number and email address on the form.
- All complaints should contain the following information:
    - The name of the alleged student, employee, faculty, department, etc., involved in the complaint.
    - A detailed written statement that describes the nature of the complaint, including the date, day, approximate time and location of the occurrence.
    - The date of submission of the complaint will be documented in the Student Complaint Portal.

Informal Resolution

Students should begin the informal process by addressing their complaint directly with the staff, faculty or other students involved with the complaint. (Note: this requirement does not apply to alleged cases of harassment, violence, sexual misconduct, discrimination or situations that are governed by the University Academic Honesty Policy).

Formal Resolution

In the event the student is not able to resolve their complaint through informal means, the student should file a formal written complaint using the Student Complaint Portal or by reporting their complaint through the Hotline. The University will review all complaints submitted through the Student Complaint Portal.

***Academic Complaints (non-exhaustive)**

Harassment and Discrimination

Rush University promotes and maintains an environment that emphasizes the dignity and worth of every member of its community, free of unlawful discrimination, including the prevention of harassment and sexual misconduct. Rush University's prohibits sex discrimination, sexual harassment and sexual misconduct involving students. Students should report these type of incidents to Nancee Hofheimer, JD Title IX Coordinator and follow the procedures in the Prohibition Against Sex Discrimination, Sexual Harassment and Sexual Misconduct Involving Students Policy.

Request assistance from Rush University by contacting the following:

Nancee Hofheimer, JD
Title IX Coordinator
nancee_b_hofheimer@rush.edu

Disruptive Conduct/Behavior Complaints Against Staff, Faculty & Other Students

The Code of Conduct sets the standards for expected professional behavior within the University and the Medical Center. Commitment to this Code is a shared responsibility of all faculty, staff and students within the Rush University community to ensure the highest standards of behavior – whether in the classroom, the laboratory, or in the clinical setting – and that education obtained at Rush provides a sound foundation for each student's future success as an academic, scientific or health care professional. Violations of these standards are subject serious and disciplinary sanctions. Students witnessing this type of behavior are encouraged to file a complaint via the Student Complaint Portal.

Rush University makes every effort to review and resolve all student complaints that are reported in accordance with policies and procedures. There may be occasions under certain circumstances where the student believes that further action is required and that additional external review is needed to resolve their complaint. Listed below are external agencies that the student may contact for additional assistance. For other state authorization agencies please refer to the links listed below.

Links to Additional Resources

Academic Grade Appeals

- Grade appeals (*refer to specific college or program guidebook*)

Student Financial Concerns

- Student Financial Aid Appeal
- Student Refunds and Waivers Appeal
- Veteran's Educational Benefits Complaint

Title IX and Conduct Policies

Title IX: Sex Discrimination, Sexual Harassment and Sexual Misconduct Involving Students

Student Conduct Policy – contact your specific college for the process on appealing a student conduct.

- HLC Student Complaint Policy and Procedures – To report unresolved complaints at Rush University that are related to accreditation standards as set by HLC policies

  The Higher Learning Commission
  230 S. LaSalle St., Suite 7-500
  Chicago, IL 60604-1411
  Phone: (800) 621-7440/(312) 263-0456
  Fax: (312) 263-7462

- Illinois Board of Higher Education Complaint Policy and Procedures – To file a complaint to report any alleged violations of state law regulations or state authorization of higher education

  Illinois Board of Higher Education
  431 E. Adams, Second Floor
  Springfield, IL 62701-1404
  Email: info@ibhe.org
  http://complaints.ibhe.org/
  Institutional Complaint Hotline: (217) 557-7359

- Illinois Attorney General Consumer Fraud Bureau – To report alleged complaints of consumer fraud in Illinois

  Illinois Attorney General
  Consumer Fraud Bureau
  500 S. Second St.
  Springfield, IL 62706
  http://www.illinoisattorneygeneral.gov/consumers/conscomp.pdf
  Consumer Fraud Hotline: (800) 243-0618

- Department of Education Consumer Fraud Hotline To report any allegations of fraud, waste, or abuse in the disbursement of federal student aid and by contractors and vendors.

  Department of Education Building
  400 Maryland Ave. SW
  Washington, DC 20202
  Fraud Hotline: (800) 647-8733

University Student Handbook
University Catalog
Rush University Honor Code
Title IX Policy

***Note**: Some of the language in this policy was taken directly from:*

The Rush Honor Code, Prohibition Against Sex Discrimination, Sexual Harassment and Sexual Misconduct Involving Students Policy and the Rush Academic Policy

RUSH UNIVERSITY
COLLEGE OF HEALTH SCIENCES
CARDIOVASCULAR PERFUSION PROGRAM
STUDENT HANDBOOK

Dear Cardiovascular Perfusion Student,

This student handbook is intended to be an aid to you in your clinical year as you pursue your degree in Cardiovascular Perfusion. You are always welcome to come to me with any questions concerning the program.

Your next year here will be exciting, challenging and immensely rewarding. We feel confident that the structure and approach we have chosen will make you a successful student and eventually, a successful Perfusionist.

Sincerely yours,
Julie Collins MS, CCP, LP

STUDENT INFORMATION

Please fill out the information below, tear this page out and submit it to:
Julie Collins MS, CCP, LP Rm. 765A AAC

Name: _____

Address: _____

City:_____ State:_____ Zip: _____

Phone (home):_____ Phone (work):_____

Please inform the department office of any changes in address or telephone numbers during the course of this program.

Please read and sign the following:

I have read and understand the rules and regulations of the Cardiovascular Perfusion Program at Rush University as stated in the student handbook and agree to abide by them while I am a student in this program. I also agree that I will not cheat nor assist others in cheating. It is also my responsibility to report to the Program Director or course instructor if I observe anyone else cheating or violating any of the policies of this program.

Signed: _____ Date: _____

RUSH UNIVERSITY COLLEGE OF HEALTH SCIENCES
CARDIOVASCULAR PERFUSION PROGRAM
APPLICANT'S ESSENTIAL FUNCTIONS

The Cardiovascular Perfusion Program requires students during their training to perform each of the tasks listed below (varying in frequency) with or without accommodation. The purpose of this questionnaire is to identify any reasonable program accommodations that will enable these functions to be performed by the student.

Once accepted into the program the student will be asked to demonstrate their ability to perform these functions with or without accommodations. In general, the job of perfusion student varies from sedentary to heavy physical activity.

Applicant's Name _____ Date_____

[**Office use only**: oral written physical]

Directions: Indicate whether you can complete the tasks listed using the following key:

Y = Yes without accommodation

YA = Yes with an accommodation. Please indicate the type of accommodation you would require.

N – No with or without an accommodation.

Feel free to ask any questions to clarify the tasks described.

The perfusion student must be able to:

1. _____ Reach to the floor intermittently for up to 1 hour to assemble heart lunch machine.
2. _____ Move laterally in a low position.
3. _____ Reach 6 feet.
4. _____ Stack 20-pound boxes from ladder.
5. _____ Lift 40 pounds from a height of 6" to 36".
6. _____ Push and pull 50 pounds.
7. _____ Push ¼' to ½' PVC tubing onto a connector up to the second barb without touching the connecting ends.

8. _____ Attach a metal bracket with a screwing motion onto a pole at levels varying from 18 to 60 inches.
9. _____ Assemble lubber locks devices. These are small (1/16") devices attached with a screwing action.
10. _____ Place disposable supplies in a holder designed specifically for those devices. This involves a steady hand and coordination to precisely line up the device to allow it to fit into the holder and lock into place with both screwing and lever locking actions.
11. _____ Move various pieces of the circuit to the appropriate place. This involves moving around a machine 5' by 2' to make the appropriate connections.
12. _____ Tear open packages without touching interior package walls or contents.
13. _____ Stand and/or sit without a break for up to 8 hours.
14. _____ Work steadily and remain alert for up to 24 hours with minimal breaks.
15. _____ Operate computer keyboard.
16. _____ Turn 1" diameter knobs on pump to a precise level within a 2-second response time.
17. _____ Clamp and release tubing clamps to precise locations on the tubing and levels of 6" to 72".
18. _____ Conduct surgical learning activities associated with long and shorthaired animals.
19. _____ Tolerate temperatures between 60 and 85 F for 8 hours.
20. _____ Wear a surgical face mask.
21. _____ Wear protective eye wear.
22. _____ Inject blood from a syringe into a test tube.
23. _____ At 12 ft. read 1/2" tall numbers from a monitor.
24. _____ At 20 ft. read 1" tall numbers from a monitor.
25. _____ Read characters singular and in columns and transpose.
26. _____ Distinguish between shades of red.
27. _____ Visually detects an air bubble of 0.5 mm diameter in a clear solution or blood inside clear PVC tubing.
28. _____ Hear normal speaking voices with background noise and faces masked and facing away from you from up to 8 feet away.
29. _____ Use a telephone to communicate information.

30. _____ Respond by telephone within 5 minutes of a digital, vibrational or voice page.
31. _____ Transport self to hospital, change into scrub attire, and report to the OR within a total of 45 minutes.
32. _____ Use a pen, transcribe data (number and words) accurately onto a record.

_____ _____

Applicant Signature Date

_____ _____

Program Director Signature Date

_____ _____

Clinical Coordinator Signature Date

I have read the description of essential functions for the Cardiovascular Perfusion Program, and I am able to perform, or will be able to learn to perform, all of the functions except for those I have listed below.

A.

B.

C.

_____ _____

Signature Date

Essential function document was completed upon interview. Here for reference.

RUSH UNIVERSITY COLLEGE OF HEALTH SCIENCES
CARDIOVASCULAR PERFUSION PROGRAM
STUDENT PROFESSIONAL AND COMMUNITY SERVICE REQUIREMENT

Participation in service activities is an important attribute of the health science professional. A hallmark of outstanding Rush students and alumni is the desire and ability to make meaningful service contributions. Community service activities may include volunteer activities (health fairs and clinics, health education, provision of health services to at risk or disadvantaged populations, and other outreach education or clinical activities) and service on community boards, committees, work groups and other service activities that promote the health and well-being of the community and its members. Professional service may include participation in the provision of state, national or international activities to advance the quality, access and effectiveness of health care services provided by allied health professionals.

Achievement of the College of Health Sciences Excellence in Service Goal is demonstrated, in part, through:

1. Student and faculty participation in community service activities
2. Student satisfaction with and appreciation for community service.
3. Students and faculty who provide leadership and support to professional associations, boards and committees.
4. Provision of community and professional continuing education to local, national, and international audiences.

In order to support achievement of the college's service excellence goals and objectives, the college has developed a professional and community service requirement for all CHS students as a part of their academic programs.

As a requirement for program completion, each academic degree granting program will establish a minimum service requirement for each student enrolled in the program of at least sixteen (16) contact hours of approved professional or community service.

Examples of activities that may be used to meet this requirement include participation in community health fairs, community health screening and/or health services, provision of community health education, participation in approved professional service and/or continuing education activities and assistance with the delivery of seminars, lectures, workshops and related community or professional continuing education activities.

THIS IS A GRADUATION REQUIREMENT…

Rush University College of Health Sciences

Perfusion Program Professional and Service Documentation Log

Student Name: _____ Service Hours Acquired: _____

As a requirement for graduation, each student must complete at least eight (8) contact hours per year of approved community and/or professional service. Examples of activities that may be used to meet this requirement include: participation in community health fairs or other community screening, and/or service events; participation in approved professional service and/or continuing education activities; participation in PA Program recruitment or other promotional activities ; assistance with the delivery of seminars, lectures, workshops and related community or professional education activities .

The student listed above has acquired professional and/or community service by participating in the following activity (please describe in detail): _____

_____

_____

_____

_____

_____

_____

_____

Title of Activity: _____ Date: _____

Approved by [1]: _____ Date: _____

Verified by [2]: _____ Date: _____

---

1. Participation in activities should be pre-approved by the Program Director or other designated program faculty member.
2. Satisfactory completion of the activity must be verified by a designated faculty member or community professional service activity provider or coordinator.

RUSH UNIVERSITY COLLEGE OF HEALTH SCIENCES ORGANIZATIONAL CHART

CARDIOVASCULAR PERFUSION PROGRAM

PROGRAM DIRECTOR

Julie Collins MS, CCP, LP, Assistant Professor

ACADEMIC FACULTY

Allison Weinberg MS, CCP, LP

David Durdov MS, CCP, LP Clinical Coordinator

Ramandeep Kaur, PhD, RRT-ACCS

RUSH CLINICAL & INSTRUCTIONAL FACULTY

Sejal Loberg MS, CCP, LP

Mike Kotwas, BS, CCP, LP

Liz Bentley, MS CCP,LP

David Chabot, MS CCP,LP

Stephanie Canchola, MS, CCP, LP

John Englert, CCP, LP

APPENDIX A
STUDENT CLINICAL PERFORMANCE STANDARDS

PATIENT WORK UP

1. History

The student should be able to:

A. Evaluate the patient's disease process including origin, progress, and treatment prognosis.

B. Identify any problems which might relate to the conduct of cardiopulmonary bypass.

C. Identify any abnormal findings including known allergies.

D. List and define the action of all medications the patient is receiving currently and in the recent past. Describe how these medications may influence cardiopulmonary bypass management.

E. Discuss any other significant diagnostic findings and their relationship to cardiopulmonary bypass such as ECHO, EKG, and radiology.

2. Physical

The student should be able to:

A. Describe the organ systems reviewed and explain any abnormal findings.

B. Relate how these abnormalities affect the diagnosis and the conduct of cardiopulmonary bypass.

C. Describe any other abnormal findings not related to the diagnosis and relate how these findings might affect cardiopulmonary bypass.

3. Laboratory report

The student should be able to:

A. Identify the patient’s hemoglobin, hematocrit, blood gases, coagulation profile, electrolytes, blood type, and other pertinent lab values.

B. Identify those values that vary from normal and the significance of these variations in terms of cardiopulmonary bypass.

C. Identify other lab work done such as cardiac enzymes and cultures that arc significant to the case. Discuss the significance of variations.

4. Catheterization/ Echocardiography Report

The student should be able to:

A. Present Cath and/or ECHO lab findings.

B. Discuss anatomical involvement.

C. Identify the patient's cardiac output, cardiac index, ejection fraction and discuss the significance of any variation from the norm.

D. Discuss the significance of the chamber pressures, resistances and any gradients present

5. Perfusion record

The student should be able to:

A. Generate the initial calculations on the perfusion record.

B. Generate the initial work-up information on the perfusion check list.

C. If charting responsibilities are resumed ... comply with specific site’s protocol

D. Review and complete the pump record prior to filing inpatient's chart.

6. Surgical Protocols

The student should be able to:

A. Describe the operative procedure the patient will undergo.

B. Exhibit knowledge of and compliance with the surgeon, anesthesiologist and perfusion faculty protocols

EXTRACORPOREAL CIRCUIT

7. Component selection

The student should be able to:

A. Select the appropriate equipment for the procedure including, but not limited to: pumps, gas flowmeters, disposable holders, blenders, temperature control systems, safety devices, oxygenator, tubing pack, connectors, heat exchangers, filters, cardioplegia delivery systems, hemoconcentrators, cell saver and monitoring systems.

B. Describe the operational characteristics and specifications of the equipment selected.

8. Prime selection

The student should be able to:

A. Estimate the lowest, safest priming volume of the circuit.

B. Select the appropriate prime and calculate anticipated hematocrit, fibrinogen, COP, and heparin concentration at cardiopulmonary initiation.

9. Assembly

The student should be able to:

A. Assemble the circuit in a logical fashion that is consistent one day to the next, with previous thought given to what items need to be assembled first in an emergency.

B. Assemble the circuit without kinks or lines on the floor.

C. Assemble the circuit so that all components are in the proper holder and adjusted for the correct position for proper and safe conduct of CPB.

D. Assemble circuit so that all monitoring lines and safety devices are attached.

E. Assemble the tubing so that the tubing is run neatly from place to place so it is easy to evaluate the function of each segment

F. Set occlusions on all roller pumps.

G. Set up the complete circuit within 25 minutes.

10. Priming

The student should be able to:

A. Check the heat exchange for leaks.

B. Place clamps appropriately for CO_2 flush and cardiotomy or venous reservoir prime.

C. CO_2 flush using sterile technique and isolate arterial filter.

D. Initiate gas flow when appropriate.

E. Prime cardiotomy and/or venous reservoir with heparinized solution.

F. Prime the circuit in a logical and expedient manner.

G. Prime the arterial filter appropriately with no bubbles on the outlet side of the filter.

H. Prime sample and monitoring lines appropriately.

I. Prime entire circuit within I0 minutes.

J. When necessary with faculty approval obtain checked in blood components.

K. Displace crystalloid prime with blood/normalize prime.

L. Complete set up and prime of circuit for CPB initiation within 35 minutes.

11. Monitoring equipment

The student will be able to:

A. Check and set up all monitoring equipment to include pressure monitoring, expired CO_2, inline blood gases and saturations, temperatures, oxygen analyzer and bubble and level detectors.

B. Explain and test the operating parameters, limitations and importance of all monitoring equipment.

PRE BYPASS

12. Checklist

The student will be able to:

A. Complete the checklist with the faculty before the possibility of initiating bypass exists.

B. Check the appropriate area associated with each item on the checklist.

C. Explain the importance and consequence of each item on the checklist and justify any N/A entries.

13. Pre bypass awareness

The student will be able to:

A. Communicate with the faculty and other students when leaving the room once

the patient is in the operating room.

B. Note and be aware of any circumstances including hemodynamic status or complications of the operative procedure that might necessitate bypass.

C. Note and be aware of hemodynamic status referring to cardiac output, arterial blood pressure, PAP, CVP and PCWP pre bypass for comparison post bypass.

D. Note and be aware of any lab or hemodynamic changes that might necessitate changes in the circuit or prime. This might include addition of blood components, medications, ultrafiltration or dialysis.

E. Note and be aware of the patient's anticoagulation status and its appropriateness for that stage in the procedure. (i.e. during cannulation)

F. Initiate cardiotomy suction when appropriate, maintaining safety of circuit.

G. Communicate with field and appropriately assist with cannulation, volume infusion, and exsanguination.

H. Explain the importance of pre-bypass awareness.

14. Table Lines

The student will be able to:

A. Anticipate the table line hand-off
B. Receive table lines without contamination, delay or lack of communication.

C. De bubble table lines efficiently.

D. Communicate appropriately with the field during this time.

CONDUCT OF PERFUSION

15. Initiation

The student should be able to:

A. Communicate with the operative field regarding bypass initiation.

B. Minimally preload patient and check line pressure before taking clamp off the venous line.

C. Using the reservoir level and pressure monitor achieve a mechanically and physiologically smooth, safe initiation.

D. Achieve desired blood flow or oxygen delivery while maintaining an empty heart.

E. Maintain a safe level in the venous reservoir and communicate with the operative field when (D) and (E) are not compatible.

F. Adjust gas flow and note color of blood in arterial and venous lines.

G. Open arterial purge line, if appropriate to patient's flows.
H. Assure and maintain integrity of extracorporeal circuit.

I. Demonstrate knowledge of the physician's protocols regarding bypass initiation.

J. Explain the importance of (A) through (I) above and document any deviation experienced during the procedure.

16. Anticoagulation

The student should be able to:

A. Describe the coagulation process and role of heparin, Ca++, ATIII, etc. in this process.

B. Monitor and record anticoagulation during bypass by monitoring ACTs, Heparin Assay, TEG's and/or AT III levels in timely fashion.

C. Calculate additional heparin doses required using dose response method or heparin assay.

D. Demonstrate knowledge of other conditions that may affect ACT. (i.e. ATIII deficiency)

E. Demonstrate knowledge of effects of certain pharmacologic agents (i.e. aprotinin) on ACTs.

17. Temperature

The student should be able to:

A. Describe the advantages and disadvantages of hypothermia.

B. Describe the effects of temperature gradients.

C. Maintain proper temperature gradients per protocol.

D. Cool and rewarm patient by protocol and communicate with the surgeon

E. At the initiation of warming and cooling monitor and document the water and arterial blood temperatures.

F. Maintain desired temperature by heater cooler adjustments thereby making temperature and the heater cooler status part of the scan.

G. Anticipate and prepare heater-cooler (s) for next temperature requirement during CPB.

18. Hemodynamics

The student should be able to:

A. Maintain blood flows, pressures and systemic vascular resistances in compliance with protocols and without large changes in blood flow or large boluses of medications.

B. Discuss the physiologic phenomenon associated with the patient's hemodynamic status.

C. Understand the significance of an elevated CVP or PAP and take appropriate action.

19. Pharmacology

The student should be able to:

A. Describe mechanism of action and doses of all drugs used during CPB.

B. Administer the appropriate drug at the appropriate dose at the appropriate time.

20. Hematocrit

The student should be able to:

A. Monitor hematocrit in timely fashion.

B. Determine desired hematocrit by protocol and patient oxygen consumption status.

C. Maintain desired hematocrit and colloid osmotic pressure by anticipating cell saving, plasmapheresis, ultra-filtration, adding blood or crystalloid, or facilitating urine output.
D. Justify all actions in adjusting hematocrit

21. Blood gases and oxygen saturations

The student should be able to:

A. Monitor blood gases and oxygen saturations in a timely fashion.

B. Determine acceptable limits for parameters by examining normal limits and the patient's status.

C. Maintain standards on pH, pC02, p02, Sa02 and Sv02.

D. Explain the importance and interrelationship of pH, pC02, p02, Sa02 and Sv02.

E. Determine the potential cause of acid-base imbalance.

F. Respond appropriately to acid base imbalance by appropriate adjustments of ventilation, flow, and/or addition of drugs.

22. Chemistry labs

The student should be able to:

A. Decide the appropriateness of running biochemical testing.

B. Appropriately treat any abnormalities.

C. Communicate the selected treatment with appropriate OR PERSONNEL.

23. Procedural awareness during bypass

The student should be able to:

A. Anticipate surgical teams' requests and upcoming events.

B. Respond to surgical teams' requests in an appropriate and timely fashion.

C. Report and describe stage of operative procedure.

D. Be aware of any volume changes in the reservoir.

E. Be aware of why these changes might have occurred and communicate appropriately with the surgical field.

F. Be aware and correct air locks in the venous line.

24. Safety

The student should be able to:

A. Identify potential hazards in the procedure.
B. Identify precautions to avoid these hazards.

C. Attach, periodically check and recognize all safely devices and alarms in the system.

D. Perform his/her duties in a responsible matter maintaining the patient's well-being as priority.

25. Knowledge of emergency procedures

The student should be able to:

A. Identify potential emergency situations during CPB.

B. Explain and justify the appropriate response

26. Termination

The student will be able to:

A. Correct all acid base abnormalities prior to termination of bypass.

B. Communicate with anesthesia on ventilation and other readiness.

C. Have adequate volume in reservoir or readily available for transfusion.

D. Wean off bypass per physician’s protocol.

E. Monitor reservoir level and patient hemodynamics while communicating with the surgeon and anesthesia.

F. Note any abnormalities and potential treatment such as IABP.

POST BYPASS

27. Post bypass awareness:

The student should be able to:

A. Monitor the patient's hemodynamics and EKG, communicating any changes to team.

B. Monitor communication in the room regarding the patient's status.

C. Be prepared to take action.

28. Circuit volume

The student should be able to:

A. Infuse volume post cessation of venous return exercising all precautions and communicating appropriately.

B. Identify, when appropriate, the portions of the circuit that should be emptied to process blood for anesthesia.

C. Select appropriate processing for pump blood.

D. Process blood efficiently without diverting attention or wasting blood.

E. Communicate with anesthesia regarding the processed blood.

29. Coagulation

The student should be able to:

A. Calculate protamine dose by the dose response or alternative method in a timely fashion

B. Be aware of protamine infusion and the potential hazards to the patient and the circuit.

C. Report any potential reaction prospectively.

D. Take the appropriate precautions to avoid protamine in the circuit.

E. Obtain post protamine ACT, Heparin Assay, and/or TEG and communicate appropriately.

30. Clean up:

The student should be able to:

A. Participate in the cleanup process while still monitoring the patient.

B. Not compromise the circuit integrity before the lines are handed back.

C. Manage the cleanup process to clean the pump of the circuit as quickly as possible once lines are handed down and patient chest is closed.

D. Explain the significance of (B) and (C)

31. Paperwork:

The student should be able to:

A. Complete the pump record.

B. Manage all charges.

C. Distribute paper work appropriately and enter case in computer system.

D. Utilize incident reports liberally and file appropriately.

PERSONAL/ PROFESSIONAL

32. Capabilities:

The student will demonstrate the ability to:

A. Organize his/her thoughts in a logical matter.

B. Approach problem solving in a logical fashion.
C. Communicate with the clinical coordinator, clinical faculty, and other health care professionals.

D. Function as a team member.

E. Present an appearance that is appropriate to the clinical assignment.

33. Attendance

The student will:

A. Report to the operating room and the instructor at the appropriate time.

B. Contact the clinical coordinator if he/she is unable to report to the clinical assignment.

34. Communication:

The student will:

A. Use appropriate language, grammar, and tact when communicating inside and outside the clinical area.

B. Address the faculty, surgical, team and anesthesia team in an appropriate and professional manner and timely fashion.

APPENDIX B

GUIDE TO PROFESSIONAL CONDUCT

Professionalism is an essential part of medical care and protocol. It relates to the intellectual, ethical, behavioral and attitudinal attributes necessary to perform as a health care provider or manager. As it applies to his or her professional role, the student will be expected to:

Attention

1. Demonstrate awareness of the importance of learning by asking pertinent questions, identifying areas of importance in practice and reporting and recording those areas.
2. Promote a positive learning environment by avoiding disruptive behaviors in class, laboratory, and clinical or practicum rotations such as talking or other activities that interfere with effective teaching and learning.

Participation

1. Complete assigned work and preparation for class, laboratory, and clinical or practicum objectives prior to attending.
2. Participate in both formal and informal discussions, answer questions, report on experiences and volunteer for special tasks and research.
3. Initiate alteration in patient care techniques when appropriate via notification of instructors, staff and physicians.

Dependability and Appearance

1. Be punctual and reliable in completing assignments with minimal instructor supervision.
2. Promote a professional demeanor by appropriate hygiene, grooming and attire.

Communication

1. Demonstrate a pleasant and positive attitude when dealing with patients and co-workers by greeting them by name, approaching them in an open and friendly manner, and setting them at ease.
2. Explain procedures clearly to the patient

3. Ask patients how they feel and solicit patient comments regarding the patient's overall condition and response to assessment and/or therapy.
4. Communicate clearly to staff and physicians regarding the patient's status, utilizing appropriate charting, oral communication and the established chain of command.
5. Demonstrate a pleasant and positive attitude when dealing with co-workers, instructors, faculty, nurses and physicians.

Organization

1. Display recognition of the importance of interpersonal relationships with students, faculty, and other members of the health care team by acting in a cordial and pleasant manner.
2. Work as a team with fellow students, instructors, nursing staff and he physician in providing patient care.
3. Organize work assignments effectively.
4. Collect information from appropriate resources.
5. Correlate care to overall patient condition.
6. Adapt care techniques to overcome difficulties.
7. Devise or suggest new techniques for patient welfare or unit efficiency.

Safety

1. Verify identity of patients before initiating therapeutic action.
2. Interpret written information and verbal directions correctly.
3. Observe and report significant changes in patient's condition promptly to appropriate persons.
4. Act to prevent accidents and injury to patients, personnel and staff.
5. Transfer previously learned theory and skills to new/different patient situations.
6. Request help from faculty/staff when unsure.
7. Comply with hospital and university guidelines for performance.

Examples of critical errors in professional conduct and judgment include:

1. Failure to place the patient's welfare as first priority.

2. Failure to maintain physical, mental and emotional composure.
3. Consistent ineffective and/or inefficient use of time.
4. Failure to be honest with patients, faculty and colleagues.
5. Scholastic dishonesty in any form.
6. Failure to follow the Rush University Medical Center Code of Conduct.

Completion of Course Evaluations

1. Students are required to complete all end of semester course evaluations. All students will be given a grade of incomplete (I) until 100% completion rate is reported.
2. Students will not be allowed to register for classes until the grade of incomplete (I) is removed and replaced with either a letter grade or a pass/fail grade.

Suspected violations of the Professional Policy will be handled in accordance with the professional standards outlined in the student Handbook. Violators of this policy may be placed on academic probation and may be denied permission to continue in the program.

Harassment and Fraternization

While we encourage students to network within the perfusion community and get to know other perfusionists, we want to ensure the safety of both our students and clinical instructors. Any issue that may arise that makes either a student or clinical affiliate uncomfortable may be described as harassment. Please review the official RUMC statement below as well as the official policy located in the University handbook.

In order to avoid such situations, student and clinical instructor fraternization is strongly discouraged. We understand that students may be invited to team outings, manufacturer supported meals, hospital extracurricular events etc. We do not intend to bar attendance to these events, however we want to stress that professional behavior is expected. Students and clinical instructors should not place themselves in any scenario that could be

construed as inappropriate; therefore, one-on-one extracurricular fraternization is discouraged.

Harassment: Policies and Procedures

The Policies and Procedures on Sexual and Other Harassment for the University and nonacademic sectors of the institution are intended to increase the awareness of Rush's long-standing commitment to preventing harassment and to focus on the internal resolution of any complaints. Under these policies and procedures, the more familiar category of sexual harassment as well as harassment related to age, ancestry, color, disability as defined by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, gender, gender identity and/or expression, marital or parental status, national origin, pregnancy, race, religion, sexual orientation, veteran's status, or any other category protected by federal or state law is prohibited. The provisions include protections for and prohibit retaliation against an individual making a complaint or supplying information about a complaint. They also incorporate protections for a person who considers himself or herself accused in bad faith. While all administrators and supervisors have responsibility under this document, certain people have been specifically designated to deal with concerns and complaints that might come forward. Inquiries or complaints of harassment from students, residents, or faculty members will be handled through the Office for Equal Opportunity by contacting:

Kevin Irvine
Senior Talent Acquisition Consultant, Individuals with Disabilities
Co-Chair, Rush ADA Task Force
kevin_irvine@rush.edu

Copies of the Policies and Procedures are available from the Office for Equal Opportunity and are on the Rush Intranet.