Health Professions Department – Missoula College
2022 Assessment Report

All areas shaded in gray are to be completed by the department/program.
This document will be posted online and must be accessible electronically (including appendices).

MISSION STATEMENT

The Department of Health Professions, Missoula College, University of Montana seeks to prepare students to be health practitioners who are technically competent and who are effective in a variety of clinical, agency and community settings. The Health Professions Department offers five Associate of Applied Science (A.A.S.) Degrees, and one Associate of Science (A.S.) Degree, with courses and learning experiences that contribute to understanding the health needs of individuals and society. Clinical affiliations and on-site learning experiences are essential elements of all programs; local communities, their agencies, and organizations are all valuable resources and provide cooperative experiences in health delivery systems.

DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each departmental objective, indicate which of the five Priorities for Action the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

1. To provide programs of study that integrate a variety of health-related disciplines to prepare students for careers in health professions.

   This objective directly supports UM's first priority for action: Place student success at the center of all we do. To be successful, students must recognize and embrace the reality of a health career — which is interdisciplinary and team-oriented in nature. By sharing many pre-requisite classes, by employing cross-disciplinary lab simulations, and through student advising and career counseling (including an emphasis on "Plan B" options for students pursuing highly competitive programs), the MC Health Professions Department ensures that students enter programs fully informed and strongly supported to achieve success. Guided by formalized independent Accreditation standards, our Health programs also provide structured, detailed processes to support those students who struggle with the volume or complexity of didactic coursework or its practical application.

   This objective also supports UM Priorities two through five. Interdisciplinary education is indeed "excellent and innovative" and requires close coordination amongst our program faculty. This reflects a commitment to our Mission, and underscores the importance of the roles of ***both faculty and administrative staff*** in providing direct student support (people always).

   UM's Priority of ***"Partnering with Place"*** is wholly engrained within our department model, where our close, multi-layered relationships with health facilities provide the foundation for experiential learning in the clinical setting. While students master skills and competencies, they are also helping address a chronic workforce shortage for virtually every health profession. ***Health professions graduates, by virtue of their integration into the workforce across the State, do indeed tell the UM story and make us proud.*** This was profoundly demonstrated the last few years through the COVID-19 pandemic, as health students joined the front lines to care for our community. Our programs donated thousands of pieces of Personal Protective

Equipment (PPE), and equipment like respiratory ventilators, to area hospitals. With the dramatic changes brought about during the pandemic, Health Professions faculty consistently demonstrated their dedication to continue to provide high-quality teaching and learning experiences. This required an immense amount of flexibility and commitment. For example, labs were split into smaller groups to allow for appropriate social distancing, doubling or tripling the amount of time spent in labs by instructors. Clinical sites were extremely limited, requiring new innovative ways for students to meet these experiences and outcomes, which pushed forward our simulation practices. This effort to maintain our programs through the many challenges exemplifies ***UM's Priorities for Action, especially, placing student success at the center of all we do***.

2. To contribute to the liberal education of students through courses designed to provide an understanding of human health, fitness and health delivery systems.

   Our second Department objective strongly supports UM's first Priority for Action regarding student success by integrating general education and the perspectives of history and social equity. As our health facility partners frequently remind us, equipping students with technical skills is but one component of student success. Their success, as well as that of health facilities, rests upon a more holistic model for education and training that embraces interpersonal skills such as effective communication and teamwork, respect and appreciation of cultural, ethnic, and socio-economic diversity, and a historical perspective on the evolution and ever-changing nature of our country's health care system. Our department philosophy supports such a holistic approach, as do our programmatic requirements and practical training.

3. To meet the continuing education needs of health professionals.

   This objective supports UM's priorities #2, 3 and 4, by recognizing that a career in healthcare represents a commitment to lifelong learning. The continual advancement and evolution of medical policies and procedures, necessitates a focus on adaptation and innovation in teaching, broadly noted herein as "continuing education." Health professions faculty are required to maintain appropriate credentials for education — and professional practice — in their respective fields. Doing so requires renewal of national certifications and state licenses, which depend in part on continuing education. This process not only sustains the quality of Health Professions programs, it supports the "people" so critical to achieving our Mission (Priority #3). "Excellence and innovation" (Priority #2) are not principles that are embraced to "add value" to our instruction, they are foundational principles upon which our programs all are based. Continuing education allows our faculty to truly "Partner with Place" (Priority #4) by serving as preceptors to support students, or by serving as consultants to emerging medical practices in the context of innovation and technological progress. We take great pride in knowing our faculty are experienced and knowledgeable in their field, which translates into greater evidenced-based teaching and learning for our students.

Program-Specific Detail

Individual Program Assessments follow, and are designed to provide more specificity in regards to student learning goals and measurement tools. They are presented below in alphabetical order:

Medical Assisting (A.A.S. Degree)
Nursing (A.S. Degree)
Paramedicine (A.A.S. Degree)
Radiologic Technology (A.A.S. Degree)
Respiratory Care (A.A.S. Degree)
Surgical Technology (A.A.S. Degree)

MEDICAL ASSISTING

MISSION STATEMENT

The educational mission of the Medical Assisting Program is to prepare qualified professionals who will improve health care in Montana, through the precise application of administrative and clinical skills. Critical thinking and professional communication are key skills that are developed through the Program, providing the foundation for excellent, personable patient care. Students are trained in both front office administrative skills such as scheduling appointments, billing and coding, and clinical skills such as taking patient histories and vital signs, administering immunizations, wound care and lab tests. A foundation in medical ethics and legal issues is provided to ensure professional conduct at all times. Clinical externship placements are designed to build student skill and confidence, while offering health care partners a chance to screen potential future employees.

Program Objectives:

1. To support the development of critical thinking skills and effective communication by providing a foundation in general education.
2. Provide a high-quality education, building administrative and clinical skills, to prepare students for entry and employment in the health care setting.
3. Prepare students to obtain employment through a career readiness micro-credential.
4. Foster compassion, patience, confidence, and teamwork
5. Offer students opportunities to connect with employers through work-based learning externships.
6. Partner with healthcare facilities and colleges to offer the program statewide.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

Student Learning Outcomes	Measurement Tools			
	Unit Exams	**Laboratory Skills**	**Clinical Externship**	**AMT Examination**
1. Demonstrate the administrative knowledge and interpersonal skills to be successful in the medical office setting (billing, coding, scheduling).	✓	✓	✓	✓
2. Prepare graduates to provide compassionate patient care, based on an appreciation of diversity in culture, ethnicity, socioeconomics.	✓		✓	
3. Understand and adhere to ethical and legal considerations in the medical profession.	✓		✓	✓
4. Demonstrate proficiency in the clinical skills used in practice (vital signs, injections, diagnostic tests, equipment operation).		✓	✓	

Student Learning Outcomes	Measurement Tools			
	Unit Exams	Laboratory Skills	Clinical Externship	AMT Examination
5. Perform duties while adhering to all safety and security protocol.	✓	✓	✓	✓
6. Program graduates will successfully complete the AMT national exam to earn the title of Registered Medical Assistant (RMA).	✓			✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
Student Learning Outcome #1 Results Skills are assessed through performance in general education pre-requisites, on written exams, and in simulated administrative office scenarios.	Program Scope was modified to allow for a step-by-step progression in development of administrative skills.
Student Learning Outcome #2 Results Grades for pre-requisite classes in communications form a central measure, while clinical externship performance provides a real-world assessment of interpersonal skills.	Addition of interpersonal communications pre- requisite addresses need for these skills, while syllabus for externship class was adjusted to include practical preparation for interpersonal skills.
Student Learning Outcome #3 Results Medical ethics class provides a foundation, while legal issues are stressed in several classes. Assessment through exams.	Revised Program Scope to include Medical Ethics, with Legal issues covered in other classes.
Student Learning Outcome #4 & 5 Results Lab exercises provide continual assessment for skills development. Clinical procedures courses and externship	Scope revised to combine four classes into two – allowing for closer alignment of didactic foundations with lab skills. New clinical sites New clinical sites with preceptors to support online didactic format. Bitterroot Health, Billings Clinic, Frenchtown Family Medical, Costcare.
Exam scores are tracked through the AMT professional association. The pass rate for this certification is 100% for students who attempt the exam. These students earn the Registered Medical Assisting credential. 98% of our students who start the second year of the program graduate and earn the credential.	Addition of Exam Prep class to Scope will better prepare students for national exam.

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

New pathway as Clinical Medical Assistant, which is a Certificate of Technical Studies. This pathway was created to respond to the overwhelming need for medical assistants in facilities across Montana. This program is in a pilot phase, integrating high school juniors and college students. In 8 months, and five classes, students will earn a Certificate of Technical Studies in Clinical Medical Assisting and sit for the Certified Clinical Medical Assistant (CCMA) credential through NCCT. As of January 2023, 13 Students in the pilot cohort have successfully completed their first course. We expect to award degrees and certification to 6 high school seniors in the pilot this summer.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum map

NURSING

NURSING PROGRAM MISSION STATEMENT (ASN DEGREE)

As the guiding principle for the Missoula College Nursing Program, the mission statement is to provide an excellent and dynamic learning environment through creative educational and clinical opportunities. This will prepare graduates for today's practice as competent and caring nurses who assist in meeting the diverse health care needs for local and global communities.

The Missoula College ASN program is approved by the Montana State Board of Nursing (MT BON), and is accredited by the Accreditation Commission for Education in Nursing (ACEN).

The Nursing Program aligns with the Priorities of Action through five core themes:

1. **Creating** a supportive environment where students are mentored by knowledgeable faculty and empowered to reach their full potential. This objective is aligned with Priority 1, placing student success at the center of all we do.
2. **Promoting** the development of knowledge and skills necessary for the intellectual, professional, and personal growth of students. This objective is aligned with Priority 2, driving excellence in innovation, teaching and learning.
3. **Developing** partnerships with local and regional healthcare facilities to establish a variety of learning opportunities and provide exposure to diverse populations. This objective is aligned with Priority 4, Partner with Place. We have robust partnerships with area healthcare facilities which enables our students to gain a wide variety of clinical practice.
4. **Acknowledging** the necessity for lifelong learning in the profession, and providing nursing education pathways to BSN or higher. This objective is aligned with Priority 1, placing student success at the center of all we do. We have partnered with MT Tech for their BSN Completion Program; however, this program is not currently being offered by MT Tech. Faculty still encourages the RN students to pursue their BSN, either by completing pre-requisites courses or even taking some BSN courses while enrolled in our program.
5. **Fostering** discovery and creativity, critical thinking skills, and competencies at the associate degree nursing entry level. This objective is aligned with Priority 2, driving excellence in innovation, teaching and learning.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

The Missoula College ASN program has adopted the QSEN (Quality and Safety Education in Nursing) competencies as a framework for our End of Program Student Learning Outcomes. The goal of the QSEN project is to prepare future nurses with the knowledge, skills and attitudes (KSAs) needed to improve the quality and safety of patient care. The six QSEN competencies are: Patient-Centered Care, Teamwork and Collaboration, Evidence-based Practice (EBP), Quality Improvement (QI), Safety, and Informatics.
These new end-of-program student learning outcomes were updated during a faculty retreat focused on curriculum and accreditation in the summer of 2021.

Student Learning Outcomes	Skills & Simulation Proficiency Exam	Didactic Proficiency Exam	Clinical & Clinical Paperwork and Evaluation	Major Paper/ Portfolio	NCLEX National Licensure Examination for RN
1. Demonstrate compassion and professionalism while delivering personalized and culturally sensitive nursing care	✓		✓		✓

Student Learning Outcomes	Skills & Simulation Proficiency Exam	Didactic Proficiency Exam	Clinical & Clinical Paperwork and Evaluation	Major Paper/ Portfolio	NCLEX National Licensure Examination for RN
2. Provide for patient safety through risk reduction and error prevention strategies.	✓	✓	✓	✓	✓
3. Apply effective communication strategies when working with clients, families, and members of the health care team to foster an environment of mutual respect and collaborative decision-making.	✓	✓	✓	✓	✓
4. Apply current evidence-based research to provide quality nursing care.	✓	✓	✓	✓	✓
5. Utilize data to improve health care practices that positively impact patient outcomes.			✓		
6. Utilize information and technology to coordinate and deliver safe care.	✓		✓		
7. Demonstrate clinical judgment within the nursing process.	✓	✓	✓	✓	✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
RN Program Completion Rate past 3-years 2019: 97% 2020: 91% 2021: 92% 2022: 94%	Nursing Program Outcome: At least eighty percent (80%) of students admitted to the program will graduate within one year of expected graduation date. The nursing program continues to maintain a high level of completion rates. The program attempts to promote graduation and student success through strong faculty-student relationships and by creating a supportive learning environment.
RN Program Employment Rates past 3-years 2019: 94.4% 2020: 100%	Nursing Program Outcome: At least ninety percent (90%) of graduates who pass the licensure exam and seek employment as an RN will report being employed.

Student Learning Outcomes results	Modifications made to enhance learning
2021: 91% 2022: 100%	All 18 (100%) of December 2022 graduates reported RN employment lined-up upon graduation and successful licensure. We believe this is not only based on the need for new nurses, but our strong relationships with our health care facility partners.
RN Program NCLEX Pass Rates (first-attempt) past 3-years 2019: 86.11% (National average 88.18%) 2020: 94.12% (National average 86.58%) 2021: 72.73% (National average 82.48%) 2022: 82.86% (National average 79.91%)	Nursing Program Outcome: Licensure exam (NCLEX-RN) pass rates will be at least 80% for all first-time test-takers during the same 12-month period. As pass rates dropped below 80% in 2021 the Nursing Program Director completed a Substantive Change Report to the accrediting body ACEN. The report described various contributing factors and an action plan to address and/or further analyze and evaluate. Contributing factors and the action plan included: COVID-19 disruptions, admission policy, progression policy, and testing policy. As demonstrated by the Missoula College 2022 pass rates being back above the national average, the faculty and director successfully implemented modifications to the program. Nursing faculty is committed to fostering the education of all persons entering the profession of nursing, and strives to promote student learning outcomes and continuously improve the quality of the program.
More than 90% of surveys returned by our graduates in Spring 2022 and Fall 2022 indicated they were satisfied with their nursing education	Nursing Program Outcome: At least ninety percent (90%) of the surveys returned by graduates will indicate they are satisfied with their education.
The six QSEN competencies - Patient-Centered Care, Teamwork and Collaboration, Evidence-based Practice (EBP), Quality Improvement (QI), Safety, and Informatics – that form the foundation of our student learning outcomes are measured in numerous ways throughout the nursing program. First, through the data listed above (graduation, employment, and NCLEX pass rates). Second, the director completes **graduation surveys** with each student in their final semester gathering feedback on how they felt these learning outcomes were achieved. **Surveys are also sent**	As one can imagine, the nursing program was greatly impacted by the COVID-19 pandemic. In the spring of 2020 students were unable to complete their clinical rotations. Faculty made great efforts to have students in all cohorts finish the semester and progress in the program, while those in their last cohort still graduated. Of special note, many of our Spring 2020 graduates went immediately to work at the Missoula City-County Health Department directly serving our community as it attempted to navigate this new health concern.

Student Learning Outcomes results	Modifications made to enhance learning
to employers of our graduates (mainly local hospitals Community Medical Center and St Patrick's Hospital Providence) to assess satisfaction of our graduates and their education. Third, the program is continually assessing these outcomes in each course – lecture, lab and clinical (noted in measurement tools table above). For clinical courses faculty utilize **clinical evaluations** to set clear expectations and assess student progression throughout the semester in achieving safe patient care, and critical thinking skills. **In lab, skills are learned, practiced, and then checked-off** in a safe environment by faculty before going into the clinical setting. **Didactic courses use quizzes, exams, papers, case studies, discussions and NCLEX-style practice questions** to incorporate student learning outcomes into all content. **Rubrics** are used throughout. **Kaplan Nursing online** product includes Proctored Integrated Assessment with benchmarks from nationally normed data. These comprehensive proctored tests are completed at the end of the semester in many courses, and provide helpful data to identify at-risk students or areas of content. Kaplan provides faculty test information and results that reviews student performance on: • topics • level of difficulty • client need category (examples: reduction of risk potential, health promotion & maintenance, basic care & comfort, physiological adaptation, pharmacological/parenteral therapies) • clinical judgment (recognize & analyze cues, prioritize hypotheses, generate solutions, take actions, evaluate outcomes) Students can also review and remediate their performance on practice (focused) and proctored (integrated) exams. This is a valuable step in their learning process.	The nursing program utilizes a "skills passport" that lists various skills demonstrated and witnessed by instructor or primary RN. This helps supervising RNs at clinical sites understand where students are in their education, and skills they are competent in performing. Student ambassadors, one from each of the 4 cohorts, attend one faculty meeting per month to provide feedback, both positive and constructive, to faculty about their courses and the program as a whole. Kaplan Nursing online product provides numerous resources (practice questions, practice tests, remediation, videos, text, etc.) for students to enhance learning and prepare for the national licensing exam. This resource is used in all four semesters.

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

The Nursing Program will continue to use formative and summative assessments to determine if student learning outcomes and program objectives have been met. Faculty meetings, including the program director, occur every other week where outcomes, results and modifications are discussed and implemented.

Student ambassador feedback continues to be a valuable method for communication among faculty and students, and for faculty to make necessary adjustments to enhance learning and support students.

The Nursing Advisory Board meets annually, where our community healthcare partners are updated and able to provide input about the program and the facilities' needs/requirements.

The Nursing Program is Accredited by ACEN and is approved by the Montana State Board of Nursing. Both agencies evaluate the Nursing Program using reports submitted annually by the Nursing Program Director. The Nursing Program is up for re-accreditation site visit in the fall of 2024.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum Map

PARAMEDICINE

PARAMEDICINE MISSION STATEMENT

The Mission of the Missoula Paramedic Program is to prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.

PROGRAM ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each *program* objective, indicate which of the five Priorities for Action the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

The following program objectives align with UM's Priorities for Action as described.

1. Educate and train students in the knowledge, skills, and professionalism to be an outstanding emergency medical services provider.

This comprehensive objective aligns strongly with UM's Priority #1, placing student success at our center. In didactic courses, lab and clinical experiences, students are supported by a team of instructors working with an active group of medical professionals. Classes are intensive and offer numerous opportunities for assessment.

Operated as a partnership with a private Emergency Services provider under an MOU, the Program structure itself is innovative, aligning with UM's Priority #2, to drive excellence and innovation. All classes are "team taught" by two or more instructors, and frequently attended by MD's and Physician Assistants from the Medical Director staff and the Program Advisory Committee.

Program content and standards are supported by independent Accreditation through the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). Their detailed guidelines support a structured approach, focused on excellence, enhancing student success.

2. Produce graduates who express critical thinking in patient assessment, intervention, and scene management, and function as effective members of a comprehensive emergency response team.

This objective supports UM's Priorities # 3 and 4, Mission First, People Always; and Partner with Place. In emergency medicine, the "team" consists of community institutions such as ambulance services, City Fire Departments, and hospitals, reflecting the community values of people and place. Being an effective team member means putting the mission first, while respecting and communicating effectively with others. As a result, these priorities are engrained firmly within the Program philosophy, structure, and operation.

Meeting workforce demand in the field of emergency medicine continues to present a challenge for Montana, while rendering assistance to individuals in our communities is a constant need. The Program's engagement within, in support of, Montana communities is a strong example of "partnering with place."

3. Train students to provide compassionate emergency care and transportation in appreciation of diversity in ethnicity, culture, socioeconomic status, and life experience.

This objective offers another strong connection to the priority of "Mission first, people always." Emergent situations demand quick action that must be delivered with equity and compassion, amidst often chaotic circumstances. Program students learn to place patients always at the center, while executing an emergency response mission requiring them to work alongside others in teams. The importance of effective and equitable communication to both patient care and effective provider teamwork is central to the program, beginning with pre-requisite coursework.

This objective also exemplifies UM's Priority #5, Proudly tell the UM story. What better ambassadors could UM have than emergency response team members, representing UM's commitment to our communities and to excellence in education? The program offers outstanding opportunities for UM to showcase all of its health programs, as well as these vital commitments.

4. Prepare students to successfully complete the National Registry cognitive and psychomotor exam to earn the National Paramedic Certification (NRP).

This comprehensive objective essentially integrates all UM's top priorities for action. Passing the national registry exam represents a threshold achievement that reflects the Program's commitment to student success, excellence and innovation, and it is accomplished through partnerships with both people and place. The graduates of the Program will undoubtedly tell the UM story with pride.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

Student Learning Outcomes	<Measurement Tool>			
	Didactic Unit Exams	Laboratory Skills	Clinical Skills Tracking	National Registry Exam
1. Integrate knowledge of human anatomy and physiology, including life span development & pathophysiology	✓	✓	✓	✓
2. Exercise critical thinking in the patient assessment, intervention, and transport processes	✓	✓	✓	✓
3. Master knowledge & skills to manage cardiac arrest, peri-arrest, shock, & respiratory failure with early interventions	✓	✓	✓	✓
4. Provide compassionate patient care and transport with equity and efficacy	✓		✓	
5. Display professionalism and effective communication as a team member		✓	✓	
6. Pass National Registry Paramedic Exam	✓	✓	✓	✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<Insert Learning Outcome results, particularly the high scores or low scores for the goal discovered from assessment data> The Paramedic A.A.S. Degree Program admitted its first cohort in the Fall 2020 semester. As such, no results are available yet to assess learning outcomes, and no modifications have been made. **Program Retention (Completion) Rates:** 2020: No reporting data (initial year of program so no graduating class that year) 2021: 13 students began the program. 10 completed, 1 withdrew, 2 deferred until our current 2023 cohort 2022: 16 students began the program, 13 completed, 1 withdrew, 2 are completing in 2023	<Insert any curricular, pedagogical, or assessment modifications made to enhance learning> In 2022, faculty created a robust online component via Panopto to supplement our in-person lectures. This will allow the program to offer a hybrid program starting in 2023. Our goal is to have a full (16) in-person program and 4-6 hybrid students in the program that begins in 2023. Experienced and knowledgeable faculty continue to create course content that is up-to-date and relevant for students, and in-line with current standards. The program continues to utilize its strong relationships with clinical partners and health care facilities across the state, to create new clinical sites and experiential learning for students.
Program NREMT Paramedic Exam Pass Rates 2020: No reporting data (initial year of program so no graduating class that year) 2021: 100% (10 students tested, 10 passed on first attempt) 2022: 92.8% (14 students tested, 13 passed on first attempt, 1 student passed on second attempt)	
Program Positive Placement Rates **Employment rates post-graduation** 2020: No reporting data (initial year of program so no graduating class that year) **2021: 100%** Of the 10 completed students, all 10 were immediately hired as paramedics. 4 were hired as medics by Missoula City Fire, 1 was hired by Seattle Fire, 2 were hired by Missoula Emergency Services, 1 was hired at Logan Health, 1 was hired as a wildland fire medic, 1 was hired by Missoula Rural Fire. **2022: 100%** Of the 13 students that completed the program, all 13 were immediately hired as paramedics. 7 were hired as medics by Missoula City Fire, 3 were hired by Missoula Rural fire, 2 were hired by Missoula Emergency Services; 1 was hired by St. Pete's ambulance	

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

The Program earned its “Letter of Review,” a conditional Accreditation approval, in Spring 2020, and will undergo a self-study, site visit and final review with CoAEMSP following graduation of the first cohort, December 2021. The Director and faculty are preparing for our CoAEMSP site visit and expect that to happen near the end of 2023.

After the first few years of this program, we will continue to integrate student and community feedback, through an active and involved Advisory Board. Student success data, based on NREMT Paramedic Exam pass rates and employment, will continue to monitored.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum map

RADIOLOGIC TECHNOLOGY

MISSION STATEMENT:

The educational mission of the Radiologic Technology Program is to prepare qualified professionals who will enhance the health and well-being of their patients by obtaining high-quality diagnostic medical images while minimizing the dangers of ionizing radiation.

To accomplish this mission the program delivers instruction in the science of imaging technology and training in imaging procedures, while emphasizing the delivery of compassionate care that reflects an ethical understanding of the human condition and a respect for diversity. Graduates of the program are employed in a variety of hospital and out-patient settings and can advance their skills into modalities such as MRI, CT, and radiation therapy. Curriculum content is directed by the American Registry of Radiologic Technologists (ARRT), the national certifying body, and program graduates sit for a national certification exam upon completion.

PROGRAM ALIGNMENT WITH PRIORITIES FOR ACTION

1. Educate and train students to demonstrate the scientific knowledge, technical competency, and interpersonal skills to be successful in the profession.

To achieve this objective the Rad Tech Program integrates UM's Priorities for Action #1 and #2, placing student success at our center, and driving excellence in teaching and learning. Didactic classes blend in person lectures, on-line modules, and group exercises as the foundational techniques to master the concepts of electromagnetism and x-ray production, while innovative lab and simulation scenarios employ kinetic learning methods to build proficiency in hundreds of x-ray procedures. It's common for students to struggle to keep pace with the volume and complexity of our material, so study sessions and group exercises are supported by our faculty.

2. **Produce graduates who express critical thinking skills and the ability to apply textbook knowledge to real-world situations**.

This objective speaks to UM's priority to "Partner with Place." The student clinical experience can be challenging, because different facilities maintain varying protocols for even routine x-ray procedures. Students must learn to adapt their lab training to accommodate the preferences of their clinical facility hosts, and our program faculty facilitate this process by maintaining an active presence in the facilities and sharing updated information on the ever-evolving protocols and procedures that are used. By preparing our students to adapt to their facility preferences, the Rad Tech program truly does Partner with Place, while also supporting student success.

3. Prepare students to provide compassionate patient care, based on an appreciation of diversity in culture, socioeconomic status, and life experience.

As a caregiver in the medical field, there is perhaps no more critical qualification than to treat each and every patient the same – as we like to say: "as if they were your own grandmother." Providing compassionate, quality care is at the heart of every health discipline, and this approach resonates strongly with UM's Priority #3 – "Mission first, people always."

4. Prepare students to respond to ever-changing technology and knowledge in the medical field by promoting a culture of lifelong learning.

This objective simultaneously relies on, and supports, UM's first two Priorities (placing student success at our center, and driving excellence and innovation in teaching & learning). The rapid rate of change in medicine can be staggering, as new technologies and new insights into human physiology build upon each other. As a result, keeping pace with these changes presents an ongoing challenge, one to which our faculty are well-adapted, and adept at conveying to our students.

5. Prepare students to successfully complete the national registry exam to earn the credential of Registered Radiologic Technologist in Radiography [RT(R)].

If one were to survey the educational background of the State's Certified and Licensed Radiologic Technologists, the results would demonstrate a profusion of Missoula College graduates, with many hospital imaging departments consisting of a majority of Griz alumni. There is perhaps no more direct way to "Proudly tell the UM story" than to empower our students and graduates to provide supportive, comforting care to those facing health challenges in our communities. Our Radiologic Technology program is, indeed, very proud of the role we play in meeting workforce demand, while also knowing that individual lives are touched on a daily basis by our students and graduates.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

Student Learning Outcomes	<Measurement Tool>				
	Unit Exams	Laboratory Skills	Clinical Skills	Competency Check-offs	National Registry Exam
1.Demonstrate technical knowledge of x-ray physics, equipment, & image production	✓	✓	✓	✓	✓
2. Exhibit & apply knowledge of anatomy & pathology (patient positioning & image acquisition)	✓	✓	✓	✓	✓
3. Comprehend radiobiology & consistently practice radiation safety	✓		✓	✓	✓
4. Employ critical thinking skills & adapt to real-world situations		✓	✓	✓	
5. Display interpersonal skills & professionalism (workplace)		✓	✓	✓	
6. Provide effective & compassionate care with equity	✓		✓	✓	
7. Pass the National Registry Exam	✓			✓	✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<Insert Learning Outcome results, particularly the high scores or low scores for the goal discovered from assessment data> ***ARRT Title:*** ***Image Acquisition and Evaluation*** National Registry Scaled Score: **8.3/10** Unit Summative results mirror National Registry	<Insert any curricular, pedagogical, or assessment modifications made to enhance learning> • Added more Digital imaging Content and more focus on Equipment Operation. • Revised curriculum: increase credits of two courses, eliminating another • Sampled new on-line platforms to supplement classes

Student Learning Outcomes results	Modifications made to enhance learning
Equipment Operation and Quality Assurance National Registry Scaled Scores: **8.1/10**	• Developed group assignments & assessments to enhance learning
<u>Anatomy, Pathology & Positioning</u> ***ARRT Titles:*** ***Head, Spine and Pelvis:*** National Registry Scaled Score***:*** **8.0/10** ***Thorax and Abdomen:*** National Registry Scaled Score: **8.0/10** ***Extremities:*** National Registry Scaled Score: **8.2/10** Unit Summative results mirror National Registry Formative assessments & lab observations Preceptor feedback provides formative, subjective assessment while clinical competencies provide summative matrix	• Selected new textbook & workbook • Selected new on-line modules to supplement lectures • Retained & oriented clinical preceptors with new model
<u>Radiobiology & Radiation Safety</u> ***ARRT Titles:*** ***Radiation Physics/Radiobiology:*** National Registry Scaled Scores: **8.0/10** ***Radiation Protection***: National Registry Scaled Scores: **8.3/10** Unit Summative results mirror National Registry Formative assessments & lab observations Preceptor feedback provides formative, subjective assessment while clinical competencies provide summative matrix	No significant modifications made
Critical thinking skills, and Professionalism & Interpersonal skills Lab observations Preceptor feedback provides formative, subjective assessment while clinical competencies provide summative matrix	Retained & oriented clinical preceptors with new model
<u>Patient care & equity</u>	• Recruited nursing faculty to deliver patient care class

Student Learning Outcomes results	Modifications made to enhance learning
Patient Interactions and Management: National Registry Scaled Score: **8.6/10** Unit Summative exams Preceptor feedback provides formative, subjective assessment while clinical competencies provide summative matrix	• Revised curriculum to focus content on most relevant material
National Registry Exam results 2020-2022: **High score: 96** **Low score: 65** **Pass rate: 75%**	• Revised Registry review class to require Kettering seminar • Invested in on-line exam review/prep resources

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

- Monitor National Registry Exam results (ongoing)
- Adjust assessment review in response to new National Exam content structure (which reorganizes subject areas)
- Monitor effectiveness of Kettering seminar and new on-line tools
- Monitor effectiveness of two new textbooks (Positioning)
- Engage student feedback on course materials
- Monitor increased reliance of ARRT (R) Examination on Digital imaging Parameters/Questions.
- Monitor tailoring of Curriculum and Registry Review Course to current ARRT Exam content and increased emphasis on Radiation Physics, Equipment Operation, Quality Assurance and Digital Imaging Content.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum map

RESPIRATORY CARE

MISSION STATEMENT

The mission of the Respiratory Care program is in alignment with the mission of Missoula College as it is committed to developing skilled, knowledgeable, safe entry level graduates who will improve the quality of health care as they implement the critical thinking skills developed during their progression within the program. The primary focus at all times is ensure that program graduates are capable of providing patient care of the highest caliber and that they do so in a caring, sensitive, compassionate, and above all, a technically competent fashion. The program provides access to the knowledge and skills that will allow students to successfully pass national licensure examinations. Commitment to life-long learning as an imperative to maintaining professional competency is stressed. Recognition of the implications of diversity holds for ethical, effective health care is common to all aspects of our curriculum. The faculty role includes modeling respect for individual worth, diversity, and lifelong learning, as well as recognizing the need to remain technically competent in their professions as respiratory therapists and educators.

The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). The program received re-accreditation in July of 2021.

DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each departmental objective, indicate which of the five Priorities for Action the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

1. Demonstrate competency in the application of respiratory care, which integrates science and evidence-based medicine to provide safe, ethical, and quality care, and promote the pulmonary health of patients, families, and communities. Supports Priority 1, Priority 2, and Priority 4
2. Employ relationship-centered interventions that are caring, compassionate, protective, therapeutic, and respectful of human differences. Supports Priority 3
3. Demonstrate technical proficiency in all skills necessary in their role as respiratory care practitioners. Supports Priority 2
4. Exhibit critical thinking skills in providing patient care. Supports Priority 2
5. Collaborate with inter-professional teams to foster open communication, mutual respect, and shared decision-making to achieve quality patient care. Supports Priority 1, Priority 2, Priority 3, Priority 4, and Priority 5
6. Understand and act upon the need for life-long learning and continue academic progression to the BSRC or higher, and successfully pass the NBRC TMC and CSE examinations on the first attempt. Supports Priority 1 and Priority 5

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

Student Learning Outcomes	<Measurement Tool>				
	Unit Exams	Laboratory Skills	Clinical Skills	Competency Check-off	National Registry Exams
1. Demonstrate competency in the application of respiratory care, which integrates science and evidence-based medicine to provide safe, ethical, and quality care, and promote the pulmonary health of patients, families, and communities.	✓	✓	✓	✓	✓

Student Learning Outcomes	<Measurement Tool>				
	Unit Exams	Laboratory Skills	Clinical Skills	Competency Check-off	National Registry Exams
2. Employ relationship-centered interventions that are caring, compassionate, protective, therapeutic, and respectful of human differences	✓		✓	✓	
3. Demonstrate technical proficiency in all skills necessary in their role as respiratory care practitioners		✓	✓	✓	✓
4. Exhibit critical thinking skills in providing patient care.	✓	✓	✓	✓	✓
5. Collaborate with inter-professional teams to foster open communication, mutual respect, and shared decision-making to achieve quality patient care.	✓	✓	✓		✓
6. Understand and act upon the need for life-long learning and continue academic progression to the BSRC or higher, and successfully pass the NBRC TMC and CSE examinations on the first attempt.	✓		✓		✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<Insert Learning Outcome results, particularly the high scores or low scores for the goal discovered from assessment data> Learning Outcome #1 • Students attend an out-sourced national exam review. • Students take two mock national examinations, TMC exam and CSE. • Formative assessments of individual classes and clinical experiences are measured using a variety of tools such as quizzes, tests, concept maps, clinical write-ups, and skills evaluations. • Graduate performance on NBRC credentialing examinations continue to meet or exceed national averages	<Insert any curricular, pedagogical, or assessment modifications made to enhance learning> • New edition text books reflect latest science and research-based patient assessment methods and practices. • New equipment purchases of mechanical ventilators and ECG machines represent upgrades in technology to aid in instruction. • Will continue to offer Kettering review, and will expand AHRC 252 Respiratory Care Review to include two (2) hours per week of additional comprehensive program material review.

Student Learning Outcomes results	Modifications made to enhance learning
Learning Outcome #2 • Emphasized in all 100 level first semester courses. • Classroom case study reviews in RES 232 Pathology & Disease. • Clinical experience. • Clinical case study preparations and presentations.	Continue to identify diverse populations and discuss various aspects and challenges in the delivery of Respiratory Care to these populations. Student reading and discussion of the book “Better: A Surgeon’s Notes on Performance” by Atul Gawande
Learning Outcome #3 Assessed in all course work unit exams, laboratory skill stations, task proficiency competencies both in laboratory and clinical settings.	• Begin formally utilizing Clinical Trac to enhance clinical performance, as well as laboratory competencies. • Annual review of NBRC Testing Matrix, in order to adapt curriculum to meet the requirements of that matrix. • Continue annual review of CoARC “Entry into Practice Standards” to ensure curriculum continues to meet current standards. • Low and high cut scores will be incorporated as part of the student’s grade in AHRC 252 Respiratory Care Review.
Learning Outcome #4 • Unit examinations. Laboratory proficiency skill stations and assessments, including SimMan scenarios in conjunction with the Nursing lab. • Clinical proficiency skill assessment and evaluations. • Mock and actual board exams.	• Continue to develop clinical scenario-based exercises and activities in both the classroom and laboratory settings. • Utilize case study coursework to strengthen critical thinking skills required for effective clinician/patient interaction and positive clinical outcomes.
Learning Outcome #5 • CoARC requirement as part of the “Entry into Practice Standards” • Communities of interest who have input into program processes and decision-making report once a year through Advisory Committee meetings. Committee includes clinical sites, former and current students, medical director… • Recent recommendation was made to increase the length of time that students spend at a single clinical site, with the idea that better evaluation of the student might occur	• Incorporated interdisciplinary simulations using students from the Nursing Program, Respiratory Care Program, Surgical Technology Program and Radiologic Technology Program. • Respiratory Care students are required to attend the annual Interprofessional Education Seminar
Learning Outcome #6 • From Oct 2018 through Jan of 2023 the TMC High Cut pass rate for MC graduates was 59.49%, as compared to the national average of 48.36%. • From Oct 2018 through Feb of 2021, the CSE pass rate for MC graduates was 61.43%, as compared to the national average of 57.91 %.	• NBRC TMC scores by content area are being evaluated annually to determine weaknesses within the Respiratory Care curriculum, and curriculum adjustments are made if abnormalities are discovered. • NBRC Test Matrix changes every five years, and it is expected that the Respiratory Care program

Student Learning Outcomes results	Modifications made to enhance learning
• For the 2022 graduating class, 3 of 9 students have attempted and passed the TMC Examination and 1 of 9 students has attempted and passed the CSE examination. It is still very early in that cohort's process	faculty will review these changes and adapt the curriculum to align with that Matrix.

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

The Respiratory Care Program will continue to use formative and summative assessments to determine if student learning objectives and program objectives have been met. Additionally, the Respiratory Care Program will begin annual evaluation of TMC content scores and monitoring NBRC testing matrix to assist in curricular changes. The Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). CoARC evaluates the Respiratory Care Program utilizing the Report of Current Status, which is submitted annually by the Program Director. CoARC assesses on-time graduation rates, Therapist Multiple Choice (TMC) pass rates and content scores, Clinical Simulation Examination (CSE) pass rates, graduate satisfaction, employer satisfaction, and employment rates.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum map

SURGICAL TECHNOLOGY

MISSION STATEMENT – SURGICAL TECHNOLOGY

The mission of the Surgical Technology program is to prepare safe, competent professionals who will enhance the health care of Missoula and Montana. Partnering for student success is a milestone of the program as it continues with its collaboration with other campuses across the state in offering the program. These entry-level professionals will be employed in a variety of settings in Montana and across the nation. This involves preparing individuals who have scientific and clinical knowledge, skill in applying the knowledge, and an understanding of the human condition. The program emphasizes excellence over perfection as this provides the compass students need in their quest for success. Respect for and understanding of diversity and ethics in medical fields is expected in graduates of the program. Because the medical field changes so rapidly, lifetime learning is emphasized for both personal and professional development. Curriculum content is guided by the Association of Surgical Technologists' Core Curriculum for Surgical Technology.

The collaborating organizations of the American College of Surgeons (ACS) and the Association of Surgical Technologists (AST) establish, maintain and promote appropriate Standards of quality for educational programs in surgical technology.

The Surgical Technology program is accredited through Commission on Accreditation of Allied Health Educational Programs (CAAHEP).

Missoula College Surgical Technology Program pursues fulfillment of their mission by:

1. Creating an environment of collaboration and mentorship among faculty, students and staff;
2. Promoting the development of knowledge and skills necessary for the intellectual, professional, and personal growth of students;
3. Acknowledging the necessity for lifelong learning and continued academic progress;
4. Building upon the rich tradition of teaching excellence and high academic and collegial standards;
5. Fostering discovery, creativity and critical thinking skills;
6. Creating professional and community partnerships, interpersonal relationships, and providing exposure to diverse populations.

PROGRAM ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each departmental objective, indicate which of the five Priorities for Action the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

Missoula College Surgical Technology Program objectives support each of the UM Priorities for Action accordingly:

1. Creating an environment of collaboration and mentorship among faculty, students and staff aligns with Priorities For Action 3 and 4. It is the people that make UM successful which embodies the principle of **"Mission First, People Always."** As a program of only two faculty, we work closely with each of our students and develop close professional relationships with all of the individuals that make our program successful, both on campus and in the facilities that provide us the healthcare settings in which we practice and learn. It is these aforementioned individuals that are fundamental to the success of the Surgical Technology program. Our program has strong and historic ties to the Missoula community and beyond. The partnerships that we have created with clinical facilities have immeasurable impact and have created long-lasting avenues for graduate employment. Over 95% of our graduates remain in the state of Montana. And, while we provide enthusiastic and capable employees, facilities give back to us in donations of space and support, as well as equipment and supplies that we would otherwise not have the resources for. The two-way investment establishes a strong **Partner with Place**.
2. Promoting the development of knowledge and skills necessary for the intellectual, professional, and personal growth of our students aligns with Priorities for Action 1. As a program we are constantly monitoring and

reevaluating our approaches, aiding in all of the programmatic decisions and actions we make in order to offer our students the best chances for success in a field that is ever-evolving. We maintain student connections throughout their time at UM and well beyond graduation, which is strong evidence of **Placing Student Success at the Center of All We Do**.

3. Acknowledging the necessity for lifelong learning and continued academic progress supports Priorities for Action 1 and 5. By offering professional advising and mentoring, maintaining high retention rates and utilizing students tracking systems the Surgical Technology program is **Placing Student Success at the Center of All We Do**. By sending competent graduates out into the workforce we continue to **Proudly Tell the UM Story** simply by example.
4. Building upon the rich tradition of teaching excellence and high academic and collegial standards embodies Priorities for Action 2. With an ever-changing field we work diligently with our community and professional organizations to ensure that curriculum and practiced pedagogy continue to evolve along with it, allowing us to best prepare our students for the healthcare world they work so hard to enter. By doing so we are **Driving Excellence and Innovation in Teaching, Learning, and Research.**
5. Fostering discovery, creativity and critical thinking skills supports Priorities for Action 1 and 2. By providing diverse clinical experiences for students, exposing them to a variety of situations and presenting them with numerous possible scenarios we are not only **Placing Student Success at the Center of All We Do**, but simultaneously **Driving Excellence and Innovation in Teaching, Learning, and Research** through the development of these attributes that will no-doubt lead to student success in the real world.
6. Creating professional and community partnerships, interpersonal relationships, and providing exposure to diverse populations embodies Priorities for Action 1,2,3 & and 4. This final objective is all encompassing and envelopes all we strive to do in our program. It all starts with the student **Placing Student Success at the Center of All We Do** and through each of their individual didactic, skill development and clinical rotations we are **Driving Excellence and Innovation in Teaching, Learning, and Research.** It is the many individuals and the facility support and cooperation that make the whole experience possible embodying both **"Mission First, People Always"** and **Partnering with Place**.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

Student Learning Outcomes	**<Measurement Tools>**					
	Advanced Discussion	**Unit Exams & Quizzes**	**Skills Simulation Laboratory**	**Clinical Skills**	**Surgical Case Portfolio**	**National Certification Exam**
1. Function as a competent entry-level surgical technologist in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains	✓	✓	✓	✓	✓	✓
2. Apply knowledge and skills from the biological sciences during the preoperative, intraoperative and postoperative phases of patient care	✓	✓	✓	✓	✓	✓

Student Learning Outcomes	<Measurement Tools>					
	Advanced Discussion	**Unit Exams & Quizzes**	**Skills Simulation Laboratory**	**Clinical Skills**	**Surgical Case Portfolio**	**National Certification Exam**
3. Communicate clearly and effectively utilizing spoken, written and technical skills	✓	✓	✓	✓	✓	✓
4. Employ appropriate ethical, professional and respectful values while interacting with diverse populations in both educational and healthcare settings	✓		✓	✓	✓	
5. Demonstrate surgical conscience and accountability; possess the ability to recognize the legal implications of an individual's actions within the educational and healthcare settings and as they relate to the Joint Commission's National Patient Safety Goals	✓	✓	✓	✓		✓
6. Demonstrate his/her role as a cooperative team member in a variety of situations in the educational and healthcare settings	✓		✓	✓	✓	
7. Perform necessary activities to prepare patients for surgery utilizing the principles of aseptic technique, critical thinking and problem solving in order to adapt to the ever-changing surgical environment	✓		✓	✓	✓	

Student Learning Outcomes	<Measurement Tools>					
	Advanced Discussion	Unit Exams & Quizzes	Skills Simulation Laboratory	Clinical Skills	Surgical Case Portfolio	National Certification Exam
8. Demonstrate the ability to prioritize and organize the surgical field, while considering the physiology and urgency of the patient care needs	✓		✓	✓	✓	
9. Incorporate learned competencies to assemble and operate instruments, equipment and supplies for the delivery of patient care as an entry-level practitioner during basic surgical procedures			✓	✓	✓	
10. Demonstrate an entry-level knowledge base by successfully completing the national certification exam to gain the credential of Certified Surgical Technologist						✓

RESULTS and MODIFICATIONS

Student Learning Outcomes results	Modifications made to enhance learning
<Insert Learning Outcome results, particularly the high scores or low scores for the goal discovered from assessment data> **Goals #1, 10:** Students continue to demonstrate an entry-level knowledge-base by successfully completing the national certification exam to gain the credential of CST (Certified Surgical Technologist). Pass rates continue to meet and exceed the 70% outcome set by the NBSTSA. Graduates recognize the importance of maintaining certification and the necessity of life-long learning as a contribution to society. 2020 Pass Rate = 80% 2021 Pass Rate = 70% 2022 Pass Rate = 90%	<Insert any curricular, pedagogical, or assessment modifications made to enhance learning> • Extra certification exam review offered during final semester of program • Implementation of the administration of two practice exams to prior to actual testing.

Student Learning Outcomes results	Modifications made to enhance learning
Goals #2-3: Student didactic coursework focuses on the application of the knowledge and technical skills required during all phases of operative care as well as the development of clear written and spoken communication. Both formative and summative assessment measurement tools are utilized and a minimum requirement of 80% is required to progress. This has not been a factor in student retention and minimum requirements have been met and/or exceeded since last submission. Accrediting Body (ARCSTSA) outcome thresholds are as follows: Retention (at or above 60%), and Graduate Placement (at or above 80%) 2020 Retention Rate = 80% 2020 Graduate Placement Rate = 100% 2021 Retention Rate = 77% 2021 Graduate Placement Rate = 80% 2022 Retention Rate = 92% 2022 Graduate Placement Rate = 100%	• Although curriculum has not been altered, unit objectives have been rewritten and fine-tuned to follow new texts and additional activities and a flipped classroom approach have been adopted to allow for more in-depth class discussion and surgical case exploration.
Goals #4-8: Students demonstrate appropriate professional values and behavior within the clinical setting as well as surgical conscience and accountability. As a whole student cohorts demonstrate their roles as cooperative team members in both educational and healthcare settings. Skill sets to perform the necessary activities required to prepare for surgery and the prioritization while considering urgency of patient care are developed following prescribed curriculum recommended by the program's accrediting body (ARC-STSA) and adhering to the Association of Surgical Technologist's motto "Aeger Primo"— patient first! Quality clinical experiences are provided and good partnerships exist between clinical facilities and the Surgical Technology program. Employer Satisfactions Surveys as well as facility staff, student preceptor and clinical faculty feedback indicates overall impressive student preparedness year after year. Formative assessments of clinical experiences provide students with relative and timely feedback.	• The implementation of real-life lab simulations and scenarios have aided in the development of surgical prioritization. This has been made possible with the addition of new lab supply and equipment as well as the interdisciplinary activities organized and carried out between all health professions programs (ie. mock stat cesarian section simulation). • Case studies and in-class discussions have presented a variety of situations that have prepared students for a plethora of potential real-life surgical scenarios
Goal #9: Students incorporate learned competencies and the delivery of safe patient care as entry-level practitioners as indicated by the return of both Employer and Graduate Satisfaction Surveys. Both return rates and satisfaction rates continue to exceed outcome	• New edition text books reflect the latest surgical methods and practices and universal precautions. • New laboratory equipment purchases and donations represent upgrades in technology that aid in instruction.

Student Learning Outcomes results	Modifications made to enhance learning
thresholds determined by the NBSTSA. Accrediting Body (ARCSTSA) outcome thresholds are as follows: Employer Return/Satisfaction (at or above 70%), and Graduate Return/Satisfaction (at or above 70%) 2020 Graduate Survey Return Rate = 75% 2020 Graduate Satisfaction Rate = 100% 2020 Employer Survey Return Rate = 20% 2020 Employer Satisfaction Rate = 100% 2021 Graduate Survey Return Rate = 100% 2021 Graduate Satisfaction Rate = 100% 2021 Employer Survey Return Rate = 88% 2021 Employer Satisfaction Rate = 100% 2022 Graduate Survey Return Rate = 100% 2022 Graduate Satisfaction Rate = 100% 2022 Employer Surveys have not yet been sent out	

PROGRAM MEASUREMENT TOOLS		
Assessment of Student Learning	**Specific Methods Used**	**Measurement Type**
Unit Exams & Quizzes	Combination instructor-created and standardized using sample questions from national certification exam question bank	Direct and Indirect, Summative
Advanced Scenario-Specific Discussions both in class (verbal) and online (written)	Rubric-based	Direct, Formative
Skills Simulation Laboratory	Rubric-based Student self-assessment/evaluation Fellow cohort classmate evaluation	Direct, Formative and Summative
Clinical Skills	Rubric-based Inclusive of: • daily CST (Certified Surgical Technologist) preceptor evaluation • weekly clinical coordinator evaluation • daily and weekly self-assessment/evaluation • final exit interview/semester recap • student and facility staff surveys	Direct, Formative
Surgical Case Portfolio	Rubric-based	Direct, Summative

National Certification Exam	Minimum threshold determined by NBSTSA is program pass rate of 80%, we strive and continue to meet a 90% pass rate and above.	Indirect, Summative

FUTURE PLANS FOR CONTINUED ASSESSMENT

<Summarize future plans for continued assessment>.

The program will continue to utilize both formative and summative assessments of student performance to ensure "real world" knowledge and skills demonstration align with program goals and learning objectives.

- Faculty will monitor changes and continue to explore emerging assessment techniques for lab and clinical skill development. Implementation of simulations, assessment and feedback will aid in the development of critical thinking skills.
- Clinical faculty will continue to monitor student progress through various clinical sites and maintain frequent communication with preceptors and management.
- Maintain course curriculum, lab and clinical activities and redesign as needed based on student and facility feedback suggests.
- Maintain accreditation by submitting annual reports which assess student performance, the curriculum, employer and graduate satisfaction, retention, graduation rates and outcome measurements.

APPENDICIES

<List any attached appendices, such as a curriculum map or full data report from a measurement>

1. Curriculum Map

APPENDICIES

A. **Curriculum Map Medical Assisting**
B. **Curriculum Map Nursing**
C. **Curriculum Map Paramedicine**
D. **Curriculum Map Radiologic Technology**
E. **Curriculum Map Respiratory Care**
F. **Curriculum Map Surgical Technology**

MEDICAL ASSISTING CURRICULUM MAP **KEY: I=Introduction D=Developed/Reinforced with opportunities to practice M=Mastery A=Assessment**					
COURSES	Demonstrate the administrative knowledge and interpersonal skills to be successful in the medical office setting (billing, coding, scheduling).	Prepare graduates to provide compassionate patient care, based on an appreciation of diversity in culture, ethnicity, socioeconomics.	Understand and adhere to ethical and legal considerations in the medical profession.	Demonstrate proficiency in the clinical skills used in practice (vital signs, injections, diagnostic tests, equipment operation).	Program graduates will successfully complete the AMT national exam to earn the title of Registered Medical Assistant (RMA).
AHMS 220 Office Procedures	I	I	I	I	
AHMS 156 Billing Fundamentals	I, D		I, D		I
AHMS 252 Computerized Billing	D, M, A		I, D, M		D
AHMS 216 Pharmaceutical Products			D, M	D, M	D
AHMS201 Clinical 1	D, M, A	M, A		D, M	M
AHMS 203 Clinical II	D, M, A	M, A		D, M	M
AHMS 298 Externship	M, A	M, A	M, A	M, A	M
AHMS 280 Exam Prep	M, A	M, A	M, A	M, A	M, A
HIT 265 Electronic Health Records	I, D		D, M, A		

NURSING CURRICULUM MAP **KEY: I=Introduction D=Developed/Reinforced M=Mastery A=Assessment**							
COURSES:	Demonstrate compassion and professionalism while delivering personalized and culturally sensitive nursing care	Provide for patient safety through risk reduction and error prevention strategies.	Apply effective communication strategies when working with clients, families, and members of the health care team to foster an environment of mutual respect and collaborative decision-making.	Apply current evidence-based research to provide quality nursing care.	Utilize data to improve health care practices that positively impact patient outcomes.	Utilize information and technology to coordinate and deliver safe care.	Demonstrate clinical judgment within the nursing process.
NRSG 230 Pharmacology	I	I	I	I	I	I	I
NRSG 231 Pharm Lab	I, D	I, D	I, D	I, D	I, D	I, D	I, D
NRSG 232 Foundations	I	I	I	I	I	I	I
NRSG 233 Foundations Lab	I, D	I, D	I, D	I, D	I, D	I, D	I, D
NRSG 234 Adult Nursing I	D	D	D	D	D	D	D
NRSG 235 Adult Clinical I	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 236 Maternal	D	D	D	D	D	D	D
NRSG 237 Maternal Clinical	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 244 Adult Nursing II	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 245 Adult Clinical II	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 246 Child & Family	D	D	D	D	D	D	D
NRSG 247 Child & Family Clinical	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 254 Mental Health	D	D	D	D	D	D	D
NRSG 255 Mental Health Clinical	D, A	D, A	D, A	D, A	D, A	D, A	D, A
NRSG 256 Pathophysiology				D	D	D	D
NRSG 259 Adult Nursing III	D, M	D, M	D, M	D, M	D, M	D, M	D, M
NRSG 260 Adult III Lab	M, A	M, A	M, A	M, A	M, A	M, A	M, A
NRSG 261 Adult Clinical III	M, A	M, A	M, A	M, A	M, A	M, A	M, A

NRSG 266 Managing Client Care	D, M	D, M	D, M	D, M	D, M	D, M	D, M
NRSG 267 Managing Client Care Clinical	M, A	M, A	M, A	M, A	M, A	M, A	M, A

PARAMEDICINE CURRICULUM MAP **KEY: I=Introduction D=Developed/Reinforced M=Mastery A=Assessment**						
COURSES:	Integrate knowledge of human anatomy and physiology, including life span development &	Exercise critical thinking in the patient assessment, intervention, and transport processes	Master knowledge & skills to manage cardiac arrest, peri-arrest, shock, & respiratory failure with early interventions	Provide compassionate patient care and transport with equity and efficacy	Display professionalism and effective communication as a team member	Pass National Registry Paramedic Exam
ECP200 Transition to Paramedic Care	I	I	I	I	I	I
ECP 201/202 Paramedic Fundamentals & Lab	I, D, A	I, D, A	I	I, D, A	I	I
ECP 207/208 Cardiology & Lab	D, A	D, A	D, A			D
ECP 206 EMS Case Studies		D	D	D, A	D, A	
ECP 216 Clinical I	D, A	D, A	D, A	D, A	D, A	D
ECP 220 Special Considerations		D, A	D, A		D, A	
ECP 221/222 OB, Neonate, Pediatrics & Lab	D, A	D, M	D, M, A			M, A
ECP 230 Trauma		M, A	D, M		M, A	M, A
ECP 232/233 Pulmonary	M, A		M, A			M, A
ECP 242/243 Medical Considerations & Lab	M, A	M, A	M, A			M, A
ECP 246/247 Hospital Clinical II & III	M, A	M, A	M, A	M, A	M, A	M, A
ECP 250/251 NREMT Exam Prep/lab	M, A	M, A	M, A	M, A	M, A	M, A
ECP Field Internship	M, A	M, A	M, A	M, A	M, A	M, A

RADIOLOGIC TECHNOLOGY CURRICULUM MAP **KEY: I=Introduction D=Developed/Reinforced M=Mastery A=Assessment**							
COURSES	Demonstrate technical knowledge of x-ray physics, equipment, & image production	Exhibit/apply anatomy & pathology (positioning & image acquisition)	Comprehend radiobiology & consistently practice radiation safety	Employ critical thinking skills & adapt to real-world situations	Display interpersonal skills & professionalism (workplace)	Provide effective, compassionate care with equity	Pass National Registry Exam
AHXR 101 Patient Care			I	I	I	I, D, A	I, D
AHXR 121 Radiologic Imaging I	I, D, A		I	I	I		I
AHXR 140 Radiologic Methods I	I, D	I, D, A		I, D			I, D
AHXR 141 Methods I Lab	I, D, A	I, D, A	I, D	I, D, A	I	I, D	I, D
AHXR 221 Imaging II	M, A		D				D, M, A
AHXR 160 Methods II	M, A	D, M, A		D, M			D, M, A
AHXR 161 Methods II Lab	M, A	D, M, A	D	M, A	M, A	M, A	M, A
AHXR 195 Clinical I & II	I, D	I, D, A	I, D	I, D, A	I, D, A	I, D, A	I, D
AHXR 225 Radiobiology & Rad Safety			D, M, A	M		M, A	M, A
AHXR 270 Registry Review	M, A	M, A	M, A			M, A	M, A
AHXR 295 Clinical III & IV	M, A	M, A	M, A	M, A	M, A	M, A	M, A

RESPIRATORY CARE CURRICULUM MAP **KEY: I=Introduction D=Developed/Reinforced M=Mastery A=Assessment**						
COURSES	Demonstrate competency in the application of respiratory care, which integrates science and evidence-based medicine to provide safe, ethical, and quality care, and promote the pulmonary health of patients, families, and communities.	Employ relationship-centered interventions that are caring, compassionate, protective, therapeutic, and respectful of human differences.	Demonstrate technical proficiency in all skills necessary in their role as respiratory care practitioners.	Exhibit critical thinking skills in providing patient care.	Collaborate with inter-professional teams to foster open communication, mutual respect, and shared decision-making to achieve quality patient care.	Understand and act upon the need for life-long learning and continue academic progression to the BSRC or higher, and successfully pass the NBRC TMC and CSE examinations on the first attempt.
AHRC 101 Communication and Management		I, D			I, D	I, D
AHRC 129 Patient Care & Assessment	I, D	I, D		I, D	I, D	
AHRC 150 Resp Care Laboratory I	I, D, A	I, D	I, D, A	D		
AHRC 131 Respiratory Care Fundamentals I	I, D	I, D		I, D		
AHRC 132 Resp Care Fundamentals II	I, D	I, D		I, D	I, D	
AHRC 231 Respiratory Critical Care	I, D, M			I, D, M	I, D	D
AHRC 232 Respiratory Pathology and Disease	I, D	D		D		
AHRC 235 Cardiopulmonary Anatomy and Physiology	I, D			D		
AHRC 250 Respiratory Care Laboratory II	D, M	D	D, M	D, M		
AHRC 255 Clinical Experience I	D, M, A	D	D, M	D, M		D
AHRC 260 Respiratory Care Laboratory III	D, M	D	D, M, A	D, M		
AHRC 265 Clinical Experience II	D, M, A	D	D, M	D, M		D

AHRC 243 Prenatal and Pediatric Respiratory Care	I, D	D		D, M		D
AHRC 252 Respiratory Care Review	D, M, A	D		D, M, A		
AHRC 270 Respiratory Care Laboratory IV	D, M	D	D, M	D, M		
AHRC 275 Clinical Experience III	D, M, A	D	D, M	D, M		

SURGICAL TECHNOLOGY CURRICULUM MAP
KEY: I=Introduction D=Developed/Reinforced M=Mastery A=Assessment

COURSES	Function as competent entry-level ST	Apply knowledge skills of all phases	Communicate clearly and effectively	Employ ethics, professionalism and respectful values	Demonstrate surgical conscience & accountability	Demonstrate role as cooperative team member	Demonstrate ability to prioritize & organize sterile field	National exam
AHST 101 Intro to Surgical Tech	I	I	I	I	I	I	I	
AHST 115 Surg Lab I	I	I	I	I	I	I	I	
AHST 154 Surg Pharmacology	I	I	I	I	I		I	
AHST 200 Operating Room Techniques	D	D	D	D	D	D	D	
AHST 201 Surg Procedures I	D	D	D	D	D	D	D	
AHST 202 Surgical Procedures II	D	D	D	D	D	D	D	
AHST 215 Surgical Lab II	D, M	D, M	D	D	D, M	D, M	D, M	
AHST 250 Surgical Clinical I	D	D	D	D	D, M	D, M	D, M	
AHST 251 Surgical Clinical II	D	D	D, M	D, M	D, M	D, M	D, M	
AHST 298 Surgical Internship	M, A	M	M	M	M	M	M	A