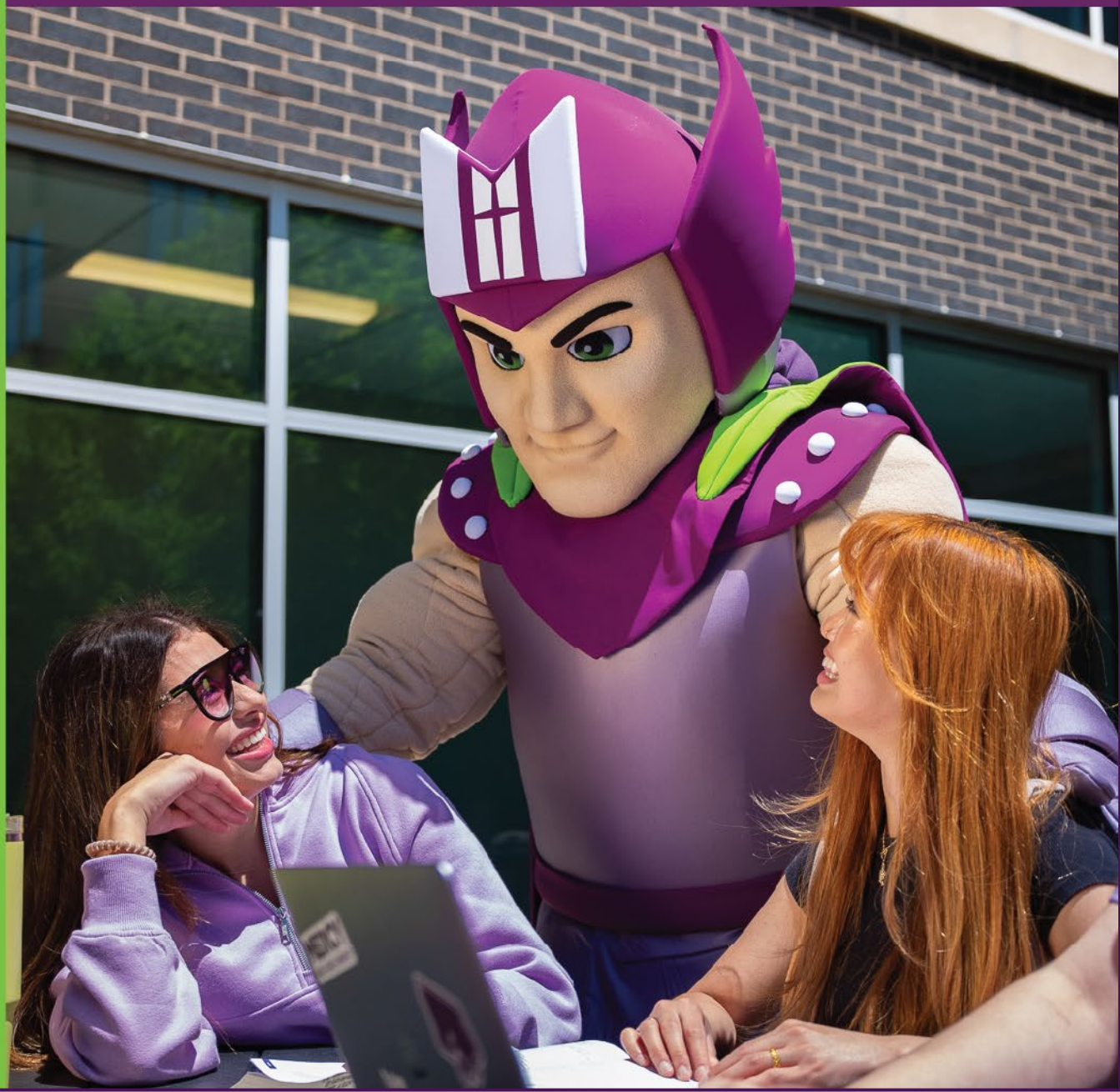
UNDERGRADUATE

MERCY
HEALTH SCIENCES UNIVERSITY

COLLEGE CATALOG

2026 - 2027



Mercy Health Sciences University
2026 - 2027
Undergraduate Catalog

http://www.mchs.edu/catalog

928 6th Avenue

Des Moines, IA 50309

(515) 643-3180

Fax: (515) 643-6698 • www.mchs.edu

Accreditation
Mercy Health Sciences University is accredited by the Higher Learning Commission. Please visit the University website (mchs.edu) and go to the About/Accreditation section to find additional accreditation information.

Disclaimer
Mercy Health Sciences University reserves the right to change, at any time and without notice, their requirements, regulations, course and program offerings, fees, charges, and other matters addressed in this catalog. Mercy Health Sciences University reserves the right to modify or terminate programs described herein. However, modification of program requirements will not adversely affect those students already enrolled in a program, nor will termination of a program affect anything other than the closure of admission thereto.

The Mercy Health Sciences University Academic Catalog for the 2026-2027 academic year is an informational document to help guide students through academic processes, procedures, and coursework. This document is not a contract. It is a planning tool and subject to change.

Table of Contents

Academic Calendar 2026-2027

Fall Semester 2026 (15-week term)

August 31	First Day of Class
August 31	Fall Tuition Payment Deadline or Installment Payment Plan Established
September 6	Last Day to Add a Course
September 6	Last Day to Drop Courses with Refund
September 7	Labor Day – No Classes
October 2	Fall Recess - No Classes (Faculty and Staff Professional Development Day)
October 21	Midterm
October 31*	Last Day to Drop Courses
November 2-6	Senior/Junior Registration for Spring and priority registration for veterans
November 9-13	Sophomore/Freshman Registration for Spring
November 26-29	Thanksgiving Break (No Classes after 4 pm, Wed.)
December 12	Last Day of Semester
December 13 – Jan. 3	Winter Break

Accelerated Programs 8-Week Term I

August 31	Term I First Day of Class
August 31	Term I Tuition Payment Deadline
September 2	Term I Last Day to Add or Drop with a refund
September 7	Labor Day – No classes
September 26	Midterm
October 1	Term I Last Day to Drop Courses
October 2	Fall Recess- No Classes (Faculty and Staff Professional Development Day)
October 24	Term I Last Day of Class

Accelerated Programs 7-Week Term II

October 26	Term II First Day of Class
October 28	Term II Last Day to Add or Drop with a refund
November 2-6	Senior/Junior Registration and priority registration for veterans
November 9-13	Sophomore/Freshman Registration
November 18	Midterm
November 22*	Term II Last Day to Drop Courses
November 26-29	Thanksgiving Break (No Classes after 4 pm, Wed.)
December 12	Last Day of Semester
December 13-Jan. 3	Winter Break

Spring Semester 2027 (15-week term)

January4	First Day of Class
January 4	Spring Tuition Payment Deadline or Installment Payment Plan Established
January 10	Last Day to Add a Course

January 10	Last Day to Drop Courses with Refund
January 18	Martin Luther King Jr. Day, No Classes
February 27	Midterm
March 6*	Last Day to Drop Courses
March 8-12	Senior/Junior Registration for Summer and priority registration for veterans
March 15-21	Spring Break (No Class)
March 22-26	Sophomore/Freshman Registration for Summer
March 26	Good Friday (No Classes, Campus Offices Closed)
April 23	Commencement Day
April 24	Last Day of Semester

Spring Semester 2027

Accelerated Programs 8-Week Term I

January 4	First Day of Class
January 4	Spring Tuition Payment Deadline or Installment Payment Plan Established
January 6	Term I Last Day to Add or Drop with a Refund
January 18	Martin Luther King Jr. Day (No Classes)
January 30	Mid Term
February 4*	Term I Last Day to Drop Courses
February 27	Term I Last Day of Semester

Accelerated Programs 7-Week Term II

March 1	Term II First Day of Class
March 3	Term II Last Day to Add or Drop with a refund
March 8-12	Senior/Junior Registration and priority registration for veterans
March 15-21	Spring Break
March 22-26	Sophomore/Freshman Registration for Summer
March 26	Good Friday (No Classes, Campus Offices Closed)
March 27	Midterm
April 4*	Term II Last Day to Drop Courses
April 24	Term II Last Day of Semester

Summer Semester 2027 (14-week term)

May 10	First Day of Class
May 10	Summer Tuition Payment Deadline or Installment Payment Plan Established
May 16	Last Day to Add a 14-Week Session Classes
May 16	Last Day to Drop 14-Week Session Courses with Refund
May 31	Memorial Day, No Classes
June 26	Mid Term
July 5	Independence Day (observance), No Classes
July6*	Last Day to Drop 14-Week Session Classes

July 5-9	Senior/Junior Registration for Fall and priority registration for veterans
July 12-16	Sophomore/Freshman Registration for Fall
August 14	Last Day of Semester

Accelerated Programs 8-Week Term I

May 10	Term I First Day of Class
May 10	Term I Tuition Payment Deadline
May 12	Term I Last Day to Add or Drop with a refund
May 31	Memorial Day, No Classes
June 5	Midterm
June 10*	Term I Last Day to Drop Courses
July 3	Term I Last Day of Class

Accelerated Programs 7-Week Term II

July 4	Independence Day (observance), No Classes
July 5	Term II First Day of Class
July 7	Term II Last Day to Add or Drop with a refund
July 5-9	Senior/Junior Registration
July 12-16	Sophomore/Freshman Registration
July 28	Midterm
August 1*	Term II Last Day to Drop Courses
August 21	Term II Last Day of Semester

Dates are subject to change.

* Dropping a course before this date will result in a grade of "W." Dropping a course after this date will result in a grade of "F." The last day to drop courses, less than 15 weeks long, will be at the 60% point.

The University

Catholic Identity Statement

Mercy Health Sciences University is a Catholic institution of higher education whose purpose is to educate students for service and leadership roles in healthcare in fulfillment of the universal mission of the Roman Catholic Church and the particular charisms of the Religious Sisters of Mercy.
As a Roman Catholic institution of higher education, Mercy Health Sciences University strives to witness to and promote the Church's social teaching and moral principles in areas such as the respect for all human life, the fostering of peace and justice, the eradication of poverty and unjust discrimination, the development of all peoples, and the growth of human culture.
In response to the specific call of the Religious Sisters of Mercy, Mercy Health Sciences University fosters the pursuit of truth and knowledge and strives to nurture the growth and wellness of the whole person – physically, spiritually, intellectually and morally.

The University manifests these beliefs by:

- Providing health sciences education rich in values and offering opportunities for spiritual, intellectual, cultural and ethical growth;
- Demonstrating leadership in service to the community, especially those who are underserved;
- Building and sustaining a Catholic Christian community called by God to live together as a holy people bound by love, solidarity and self-giving, and faith. This Catholic Christian community thus becomes a sign of God's presence within and among us;
- Respecting the beliefs of those members of other religious and spiritual traditions and inviting them to share the gifts they bring to the community;
- Providing opportunities for prayer, reflection and the study of Sacred Scripture;
- Celebrating liturgy and participating in the Sacraments; and
- Participating in the creation and development of societal structures that are humane, just, and respectful of the rights and dignity of the human person.

Inspired by the example of Catherine McAuley, who founded the Religious Sisters of Mercy and who dedicated her life to reaching out in service in Jesus' name, we, as a University community, strive continually to make this vision of our Catholic identity a reality throughout the living and learning environment of the University.

History of the Religious Sisters of Mercy (RSM)

The core values of today's Mercy Health Sciences University were born when Catherine McAuley founded the Sisters of Mercy in Dublin in 1831, in response to the desperate poverty of Ireland's Catholics under the British Penal laws. Catherine used her inheritance to open Baggot Street House of Mercy where she and like-minded women instructed children and taught young women the skills they needed to become independent. They visited the sick in hospitals and in their homes and became known in Dublin as "The Walking Nuns." The Vatican formally recognized the community in 1841, shortly before Catherine died.

Frances Warde, one of the first women to profess her vows as a Sister of Mercy, came to the United States in 1843 in response to requests from U.S. Bishops to minister to Irish immigrants. By 1893, three sisters from Mercy Hospital in Davenport opened a new hospital in Des Moines. Under the leadership of Mother Mary Baptist Martin, they first cared for patients from rooms rented at Hoyt Sherman Place. In 1899, the Mercy Hospital Training School was officially established to educate nurses. Seven students graduated in the first class in 1901.

Mercy Health Sciences University evolved from Mercy School of Health Sciences, a certificate and diploma-granting institution established as a consolidation of the Mercy Schools of Nursing, Radiology and Emergency Medical Services in January 1994. Mercy Health Sciences University was formed in July 1995. Mercy Health Sciences University is affiliated with MercyOne and Trinity Health.

The founding beliefs established by the Sisters of Mercy continue to guide the University as it educates nurses, allied health, and health science professionals in its third century of operation and as it begins its third decade as a private accredited institution of higher education. Mercy Health Sciences University encourages an open mind, a desire to comprehend, and a sense of respect for ethnic and cultural diversity.

Vision

Mercy Health Sciences University will be a locally and regionally recognized leader, transforming students into healthcare professionals who live out and extend our ministry of healing.

Mission

Mercy Health Sciences University prepares graduates for service and leadership in the healthcare community by integrating its core values with a professional and liberal arts and science education.

Values

Mercy Health Sciences University is a Catholic institution of higher education, rooted in the heritage of the Sisters of Mercy, guided by our core values of knowledge, reverence, integrity, compassion, and excellence.

Core Values Defined

Mercy Health Sciences University is guided by the five core values:

Knowledge: ability to instill in our University community a thirst to continually study, investigate, observe, and experience the world all-around for facts and ideas that can improve the health and well-being of humankind and create a love for learning.

Reverence: profound spirit of awe and respect for all creation; shaping relationships to self, to one another, and to God; and acknowledging that we hold in trust all that has been given to us.

Integrity: moral wholeness, soundness, uprightness, honesty, sincerity, as basis of trustworthiness.

Compassion: feeling with others, being one with others in their sorrows and joy, rooted in the sense of solidarity as members of the human community.

Excellence: outstanding achievement, merit, virtue; continually surpassing standards to achieve/maintain quality.

Institutional Commitments

Guided by its core values, Mercy Health Sciences University supports the following institutional commitments for all students and employees:

Knowledge Acquisition, Construction, Integration, and Application

Gains core knowledge and skills to build capacity for life-long learning.
Applies knowledge to a new situation or setting.

Demonstrates critical thinking.

Communication

Writes effectively in a variety of forms and settings.
Speaks effectively in a variety of forms and settings.
Listens to comprehend.
Reads to comprehend.
Collaborates respectfully with others to accomplish a common goal.

Servant Leadership

Exhibits personal accountability as a servant leader.
Exhibits social accountability as a servant leader.
Addresses community, national, and global needs through service.

Evidence-Based Continuous Improvement

Gains insights through assessment data.
Makes data-informed decisions to improve outcomes.
Attains purposeful change to improve outcomes.
Monitors outcomes progress.

Philosophy

Philosophy of Assessment

Mercy Health Sciences University has a commitment to embed in its culture meaningful, manageable, and sustainable assessment practices to enhance lives. To that end, the University is dedicated to implementing a systematic, continuous process of improvement aligned with its vision, mission, and values.

Philosophy of Distance Education

Distance education at Mercy Health Sciences University uses best-practice instructional methods and technologies to provide accessible, high quality educational opportunities that meet the needs of students, faculty, and the broader healthcare community seeking knowledge and skilled healthcare professionals.

Philosophy of Diversity

Mercy Health Sciences University believes it is important to encourage an open mind, a desire to comprehend, and a sense of respect for ethnic and cultural diversity.

Accreditation

Mercy Health Sciences University

Accredited by the Higher Learning Commission (HLC)
Higher Learning Commission
230 S LaSalle St #7-500
Chicago, IL 60604

Diagnostic Medical Sonography - DMS

Accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP)
Commission on Accreditation of Allied Health Education Programs
25400 US Highway 19 N, Suite 158
Clearwater, FL 33763

Emergency Medical Services - EMS

Accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP)
Commission on Accreditation of Allied Health Education Programs
9355 - 113th St. N, #7709
Seminole, FL 33775
727-210-2350
www.caahep.org

Medical Assisting - MA

Accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP)
9355 113th Street N. #7709 Seminole, FL 33775
phone 727-210-2350, website: www.caahep.org,
upon the recommendation of the Medical Assisting Education Review Board (MAERB)
2339 N California Ave. #47138 Chicago, IL 60647
website: www.maerb.org.

Medical Laboratory Science - MLS

Accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
National Accrediting Agency for Clinical Laboratory Sciences
5600 N River Rd, Suite 720
Rosemont, IL 60018-5119

Associate of Science in Nursing - ASN

Accredited by the Accreditation Commission for Education in Nursing (ACEN)
Accreditation Commission for Education in Nursing
3390 Peachtree Rd NE, #1400
Atlanta, GA 30326

The Associate Degree nursing program at Mercy Health Sciences University at Des Moines campus located in Des Moines, Iowa is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326. (404) 975-5000.

The most recent accreditation decision made by the ACEN Board of Commissioners for the Associate Degree Nursing program is Continuing Accreditation. View the public information disclosed by the ACEN regarding this program at: http://www.acenursing.com/accreditedprograms/programsearch.htm

Approved by the Iowa Board of Nursing (IBON)
Iowa Board of Nursing
400 SW 8th St, Suite B
Des Moines, IA 50309

Bachelor of Science in Nursing - BSN

Accredited by the Commission on Collegiate Nursing Education (CCNE)

Commission on Collegiate Nursing Education
655 K Street, NW, Suite 750
Washington, DC 20001
www.ccneaccreditation.org

Approved by the Iowa Board of Nursing (IBON)
Iowa Board of Nursing
400 SW 8th St, Suite B
Des Moines, IA 50309

Physical Therapist Assistant - PTA

Accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE)
Commission on Accreditation in Physical Therapy Education
3030 Potomac Ave., Suite 100
Alexandria, Virginia 22305-3085

Radiologic Technology - RT

Accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT)
Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Dr, #2850
Chicago, IL 60606

Mercy Health Sciences University Training Center

Accredited by the American Heart Association
American Heart Association
7272 Greenville Ave
Dallas, TX 75231

Institutional Memberships

American Association of Collegiate Registrars and Admission Officers
American Association of Colleges of Nursing
American Health Science Education Consortium
Association of American Colleges and Universities
Associate of Catholic Colleges and Universities
Association of College Administration Professionals
Association of Governing Boards of Universities and Colleges
Catholic Campus Ministry Association
Catholic College Cooperative Tuition Exchange
College/University Professional Association for Human Resources
Conference for Mercy Higher Education
Council for Advancement and Support of Education
Des Moines Area Interprofessional Education Collaborative
Home Base Iowa
Iowa Association for College Admission Counseling
Iowa Association of Colleges of Nursing
Iowa Association of Independent Colleges and Universities
Iowa Association of Student Financial Aid Administrators
Iowa Campus Compact
Iowa Distance Learning Association
Iowa Organization of Nurse Leaders
Iowa Private Academic Libraries
National Association of College Admission Officers
National Association of Colleges and University Business Officers
National Association of Independent Colleges and Universities
National Association of Student Financial Aid Administrators
National Campus Compact
National League for Nursing
National Orientation Directors Association
National Student Nurses Association
Sigma Theta Tau – Zeta Chi at Large (with Grand View University)
The Alpha Eta Society
The Tuition Exchange, Inc.
Upper Midwest Association of Collegiate Registrars and Admission Officers

Notices

Campus Safety Statement

Mercy Health Sciences University has information available regarding campus crime statistics. This information may be obtained from the University website at http://www.mchs.edu/Academics/Campus-Services/Campus-Safety-and-Security.

University Information

Mercy Health Sciences University reserves the right to make changes as necessary, including changes in academic requirements, policies, and fees. Changes shall go into effect whenever appropriate with such notice as is reasonable under the circumstances.

Completion Rates

Mercy Health Sciences University publishes information concerning student completion rates and performance on professional licensure/certification exams on its Consumer Information webpage found at https://www.mchs.edu/about/accreditation/consumer-information/.

Student Records and the University FERPA Policy

Mercy Health Sciences University of Health Science Family Educational Rights and Privacy Act (FERPA) Policy

Introduction and Purpose: To inform students of their rights and responsibilities pertaining to their University records, in compliance with federal notification requirements. To protect the privacy of student records. To articulate definitions relating to student records, how they may be accessed and disclosed, the complaint procedure and other information relevant to the student record.

Scope and Applicability: University employees (faculty, staff and student employees) and other covered individuals (e.g., affiliates, vendors, independent contractors, etc.) in their accessing and handling of student records, data or information in any form (paper, digital text, image, audio, video, microfilm, etc.) during the course of conducting University business (administrative, financial, teaching, research or service). This policy shall apply to all offices and divisions of Mercy Health Sciences University and to all current or former students of the University.

Policy Statement: The following constitutes University policy concerning student rights of access to personal educational records in compliance with the FERPA. Certain definitions and principles contained in the law and guidelines are as follows:

- A student is defined as one who has attended, or is attending, Mercy Health Sciences University and whose records are in the files of the University. Attendance is defined as the date of first enrollment at the University or participation in a University-sponsored program or activity, whichever occurs earlier.
- Educational records do not include files retained by individuals that are not accessible to any other person except a designee or replacement.

- Directory (public) information is limited to name, local and home address and telephone, email address, school or University, class, major field of study, dates of attendance, enrollment status, anticipated graduation date, degrees and awards received, the most recent educational institution attended and a photograph of a student taken for University purposes. Directory (public) information also includes class rosters listing students in University academic courses (Canvas); such rosters may only be used for the purpose of conducting that course.
- Record means any information or data recorded in any medium, including but not limited to handwriting, print, tapes, computer files, microfilm or microfiche.

Release of Directory Information: Directory information may be released unless the student files the appropriate form in the Registrar's Office requesting that directory information not be released. Directory information that cannot be restricted includes whether the individual was ever enrolled and degrees awarded.

Release of Grades: Reports of a student's grades are not routinely mailed. Students may access their grades electronically on the MyMercy website. The posting of a student's grades must be done in a manner designed to maintain confidentiality. Grades or evaluations linked to personal identifiers (names, University ID numbers, or social security numbers) may not be publicly disclosed without specific permission from the student. Grades or evaluations may only be posted on office doors or on websites by using randomly generated codes or numbers.

Record Storage: Students have records in one or more of the following offices:

- Registrar's Office
- Financial Aid
- Student Accounts
- Division of Student Affairs
- Division of Enrollment Management
- Human Resources (Federal Work Study)

Record Access and Exceptions: A student's record is open to the student, except as listed below. Any reference to student records or to access to student records in this document is subject to these exceptions:

- Confidential letters of recommendation placed in files before January 1, 1975.
- Financial records of the student's parents or any information contained therein.
- Employment records, except for those cases in which the employment is required as part of the student's program.
- Medical and psychological records.
- Letters of recommendation or other documents that carry a waiver of the student's right to access.
- Records compiled by campus security solely for the purposes of law enforcement.
- Student education records are open to University officials who have a legitimate educational interest in the information contained in the records.
- A University official is an employee or other agent of the University. A University official may also be a person or company with whom the University has contracted to carry out a function on the University's behalf.

- The determination of a legitimate educational interest will be made by the person responsible for the maintenance of the record. This determination will be made scrupulously and with respect for the individual whose records are involved. A legitimate educational interest requires that the individual seeking access must have the requested information to perform a job function.

Conditions of Access Waivers for Student References: To ensure the confidentiality of references, certain documents may carry waivers signed by the student relinquishing the right of access to the document. Waivers are subject to the following conditions:
Waivers can be signed only for the specific purposes of application for admission, candidacy for honor or honorary recognition and candidacy for employment.

- Waivers cannot be required.
- The student shall be told, upon request, the names of those supplying references.
- All items in the academic record not covered by waivers are open to the student. Material not covered by waivers may not be protected by keeping it out of the student's file.

Third-Party Access: Normally, records can be released, or access given, to third parties (i.e., anyone not a member of the faculty or staff), only with the written consent of the student.

Without the consent of the student, releases to third parties may be given only as follows:

- To federal officers as prescribed by law
- As required by state law
- To research projects on behalf of educational agencies, providing that the agencies guarantee no personal identification of students
- To accrediting agencies carrying out their functions
- In response to a judicial order or lawfully issued subpoena
- By Campus Security to other law enforcement agencies in the investigation of a specific criminal case
- To parents of students who are dependents as defined and verified by IRS standards
- A student's parent(s) or legal guardian(s) regarding the student's use or possession of alcohol or a controlled substance if there has been a determination by the University that the student's use or possession of alcohol or a controlled substance constitutes a violation of a University rule or regulation; and the student is under the age of 21 at the time of disclosure to the parent(s) or legal guardian(s)
- A student's parent(s) or legal guardian(s) in connection with an emergency
- To appropriate persons if the knowledge of such information is necessary to protect the health or safety of the student or other persons

Continued Record Maintenance: Nothing in this University FERPA policy requires the continued maintenance of any student record. However, if under the terms of this policy a student has requested access to the record, no destruction of the record shall be made before access has been granted to the student.

Records of Deceased Students: FERPA rights cease upon death. However, it is the policy of University that no records of deceased students be released after the date of death, unless specifically authorized by the executor of the deceased's estate, by the next of kin or as stipulated in the Record Access and Exceptions section of this policy.

Record Correction Requests: Students have the right to ask to have records corrected that they believe are inaccurate, misleading or in violation of their privacy rights. The procedures are as follows:

- The student must ask the custodian of the record to amend the record. The student should identify the part of the record that the student wants changed and the reasons.
- Mercy Health Sciences University may comply or may decide not to comply with the request. If not, the University will inform the student of the decision and advise the student of the right to a hearing. Requests for a hearing are to be sent to the Vice President for Academic Affairs. Upon request, the University will arrange for a hearing and so notify the student.
- The hearing will be conducted by a hearing officer who is a disinterested party. However, the officer may be an official of the institution. The student may be assisted by one or more individuals.
- The University will prepare a written decision based solely upon the evidence presented at the hearing. The decision will include a summary of the evidence and the reasons for the decision.
- If the University decides that the challenged information is not inaccurate, misleading or in violation of the student's right to privacy, it will notify the student that they have a right to place in the record a statement commenting on the challenged information or set forth reasons for disagreeing with the decision.
- The statement will be maintained as part of the student's record as long as the contested portion is maintained. If the University discloses the contested portion of the record, it must also disclose the statement.
- If the University decides that the information is inaccurate, misleading, or in violation of the student's right of privacy, it will amend the record and notify the student in writing that the record has been amended.

Consent to Disclosures of Personally Identifiable Information
The right to provide written consent before Mercy Health Sciences University discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to Mercy Health Sciences University school officials with legitimate educational interests. A Mercy Health Sciences University school official includes a person employed by Mercy Health Sciences University as an administrator, supervisor, instructor, or support staff member (including health or medical staff and law enforcement unit personnel) or a person serving on the board. A Mercy Health Sciences University school official may also include a volunteer, contractor, or consultant who, while not employed by Mercy Health Sciences University, performs an institutional service or function for which Mercy Health Sciences University would otherwise use its own employees and who is under the direct control of Mercy Health Sciences University with respect to the use and maintenance of PII from education records, such as an attorney, auditor, medical consultant, or therapist; a parent or student volunteering to serve on an official committee, such as a disciplinary or grievance committee; or a parent, student, or other volunteer assisting another school official in performing tasks. A Mercy Health Sciences University school official must have a legitimate educational interest to review an education record for the purpose of fulfilling any professional responsibilities.

Upon request, Mercy Health Sciences University discloses education records without consent to officials of another school in which a student seeks or intends to enroll or is already enrolled if the disclosure is for purposes of the student's enrollment or transfer. NOTE: Mercy Health Sciences University will provide records upon request under this paragraph and when the disclosure is initiated by the eligible student.

Creation, Permanence and Disposal of Student Records: The following is a general guideline regarding the disposal of student records:

- Only such records as are demonstrably and substantially relevant to the educational purposes of the University shall be generated or maintained;
- Permanent retention of student records is limited to those records which are of long-range value to the individual or the University;
- All duplicate copies of permanent records, other than those maintained by the custodian of the permanent records shall be maintained only for the minimum period of time required to serve the basic official function of the individual or department generating or maintaining them. Such records shall be destroyed as soon as they are no longer needed (i.e., within one year following graduation or two years after the last date of attendance). A student will be granted access to their records prior to their destruction when the student has an unsatisfied request outstanding.

Directory Information: In compliance with the federally-enacted regulations and University policies, directory information regarding students attending Mercy Health Sciences University shall be the:

- Student's name
- Local address
- Permanent address
- Email Address
- Telephone listings
- Date and place of birth
- Year at the University
- Dates of attendance
- Academic University and major field of study
- Enrollment status
- Participation in officially recognized activities and sports
- Degrees, honors and awards received
- Most recent educational agency or institution attended
- Photographic or electronic pictures or images

Public information pertaining to any individual student may be released by the Registrar upon inquiry unless the student has not agreed to release directory information. Partial or whole lists of students by name and address will not be released for commercial purposes.

Each major administrative unit shall define the kinds of reports and information that may be released to the public.

Information contained in personal files of the student is considered confidential information. With the exception of the information noted above, all student records are considered to be confidential and are open only to University personnel (individuals under contract) who need the information to carry out their official responsibilities (assigned duties and functions).

Although University personnel are authorized access to this information on a "need-to-know" basis (to perform specific duties and functions), they are not permitted to release information to persons outside the University unless authorized in writing by the student, by a court order or according to the exceptions listed in the Record Access and Exceptions section.

Only the official or designated person responsible for the records has the authority to release them. Records may be disclosed to a third party only on condition that the recipient will not permit others to have access to the information without the written consent of the student.

Rights of Access and Review of Records: Students have the right to inspect, review, or receive an interpretation of copies of their educational records, except as excluded below. Eligible students who wish to inspect their education records should submit to the Mercy Health Sciences University Registrar (hereinafter "school official") at 921 6th Avenue, Des Moines, Iowa 50309 a written request that identifies the records they wish to inspect. The school official will make arrangements for access and notify the eligible student of the time and place where the records may be inspected. Such requests should be honored as quickly as possible and reasonable, normally within 48 hours; if detailed documentation and/or interpretation are required, the request should be honored within ten days. In all cases, requests for such information must be honored within 45 days.

If a copy of a portion or all of the records in a student's file is requested, the custodian of the records may charge a fee for copies made, provided the fee does not effectively prevent students from exercising their right to inspect and review (under supervision of a University employee) their records. No fee will be charged to the student to search for or to retrieve records. Each custodian of records is responsible for requiring proper identification of the individual making the request about their records.

Custodians of Student Records: The Office of the Registrar shall be responsible for the proposal, interpretation, enforcement and publication of general policies and procedures consistent with state and federal laws and guidelines as they relate to the creation, maintenance, use, dissemination and destruction of records of students who are attending or have attended Mercy Health Sciences University.

Each type of student record is the responsibility of a designated University official and only that professional staff member or designee has authority to release records. Please note that some student records listed below are outside the scope of the Office of the Registrar. The responsible officials are:

- **Academic and Admissions Records (after matriculation)**
- Official: Registrar
- Location: Office of the Registrar
- **Admissions Records (prior to matriculation)**
- Official: Director of Admissions
- Location: Division of Enrollment Management
- **Alumni Records**
- Official: Vice President of Institutional Advancement and Philanthropy
- Location: Office of Alumni Affairs
- **Disciplinary Records**
- Official: Dean of Student Affairs
- Location: Division of Student Affairs
- **Employment (Work-Study and Student Employment)**
- Official: Director of Human Resources
- Location: Human Resources
- **Security Records**
- Official: Vice President of Business and Regulatory Affairs
- Location: Office of the Department of Business and Regulatory Affairs
- **Student Activities**
- Official: Director of Student Engagement

- Location: Office of Student Affairs
- **Student Financial Aid**
- Official: Senior Director of External Engagement
- Location: Office of Student Financial Aid
- **Veterans Records**
- Official: Registrar
- Location: Registrar's Office

Special Considerations for Faculty for Protecting Student Information in the Online Course Environment A FERPA policy for online and blended courses typically includes areas of focus and details regarding the protection of student information and the information that is shared between an instructor and student as part of the online course.

- Faculty teaching online courses for the University will use the institutional Learning Management System (LMS) for delivery of the course to ensure the security of student work and grades.
- Faculty teaching online courses for the University will use the University's secure online system for electronically submitting grades to the Registrar.
- All emails between the instructor and students in an online course need to occur through the LMS or via the University email system so that communications between the instructor and student, e.g., grades, feedback on student work, etc., remain confidential and protected by the University.
- LMS account information must be kept secure by faculty and students enrolled in online courses. Students in a course cannot access other students' work or grades. Faculty and students cannot share their personal LMS login information with anyone or give access to the course in the LMS to others who are not officially enrolled in the course. Exceptions are allowed for other University faculty and administration to access a course when the appropriate justification is provided and approved.
- Faculty teaching in the online environment will follow all University FERPA guidelines for sharing educational record information with other University faculty and staff and others outside the University.
- During the online course and once it is archived, all student information is protected including course data and participation.

Complaint Procedure: If a student believes the University is not in compliance with the Family Educational Rights and Privacy Act (FERPA), they should check first with the office involved and/or the Office of Academic Affairs.

If a student wishes to file a complaint with the federal government concerning the University's failure to comply with FERPA, they must submit the complaint, in writing, to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5920: https://studentprivacy.ed.gov/file-a-complaint. The Family Policy Compliance Office will notify the student and the University when the complaint has been received. They will investigate the complaint and may require further information. Following its investigation, they will provide written notification of its findings and basis for such findings. In the event the University is found not to be in compliance, it will be afforded the necessary time to comply. If it does not then comply, additional action may be taken by the Family Policy Compliance Office. For guidelines concerning this complaint procedure, see 34 CFR Paragraph and the subsequent regulations of the Family Educational Rights and Privacy Act.

Exclusions or Special Circumstances: Faculty, staff and/or student employees who violate this University policy may be subject to disciplinary action for misconduct and/or performance based on the administrative process appropriate to their employment.

Students who violate this University policy may be subject to proceedings for non-academic misconduct based upon their student status. Faculty, staff, student employees and/or students may also be subject to the discontinuance of specified information technology services based on the policy violation.

Contact:
Office of the Registrar
Mercy Health Sciences University
515-643-6744

Title IX Policy Statement

Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. and 34C.F.R. Part 106 notes: No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance. This policy is designed and intended to comply with the requirements of Title IX and 110 ILCS 155. Acts amounting to discrimination based on sex are sometimes termed "sexual misconduct or sexual violence."

This policy applies to all Title IX/sexual misconduct complaints occurring at Mercy Health Sciences University or within the educational programs and activities the University offers. This policy therefore applies to all University faculty, staff, and students, and the behavior addressed in this policy includes that which might be exhibited by other parties. Should the University become aware that any contractor, vendor, partner or other affiliate engages in sexual misconduct, it will take appropriate action.

Non-Discrimination Statement: The University does not engage in or tolerate discrimination on the basis of sex or gender and/or sexual misconduct (which includes sexual harassment and sexual violence) in its educational or employment programs and activities. Such misconduct are forms of unlawful sex discrimination under Title IX and other federal and state laws. Through a thorough and impartial investigation, the University is committed to responding to any instance of such discrimination by taking prompt and effective steps to end the discrimination and address its effects. Pregnancy/ Parenting Statement: Mercy Health Sciences University prohibits discrimination against students, faculty and staff based on pregnancy, false pregnancy, termination of pregnancy, childbirth, or recovery from any of these conditions.

Retaliation Statement: Mercy Health Sciences University prohibits retaliation against any individual who, in good faith, reports or discloses an alleged violation of this policy, files a complaint, or otherwise participates in the complaint resolution procedure. Any person who is found to have retaliated in violation of this policy, will be subject to said sanctions up to and including termination of employment or dismissal from the education program, as applicable.

The institutional official responsible for coordinating and overseeing university efforts to comply with the requirements of Title IX and this policy is called the Title IX Coordinator. This policy serves as the governing document for the Title IX Coordinator to conduct investigations of sex or gender discrimination involving employees and students. Questions or concerns regarding Title IX, this policy, or other aspects of the University's commitment to sex or gender non- discrimination may be directed to Mercy Health Sciences University Title IX Coordinator for Students.

Health Insurance and Healthcare Costs

Mercy Health Sciences University is at no time responsible for student healthcare costs. Students will maintain responsibility for their own healthcare insurance and/or costs related to healthcare treatment, whether an injury/exposure occurs on campus or in a clinical setting.

Professional Malpractice/Liability

Students who are currently enrolled in a Mercy Health Sciences University degree or certificate program, are functioning within the scope of their practice, and are being supervised by an approved instructor/preceptor during a scheduled clinical experience on Mercy's campus or with a contract affiliate are covered under the Professional Malpractice Insurance of MercyOne Des Moines Medical Center.

Accommodations for Disabilities

Mercy Health Sciences University is committed to equality of educational opportunity for all students. The Norkaitis Student Success Center facilitates academic accommodations and services for students with disabilities so students have equal access to University programs and activities. It is the responsibility of the qualified individual with disability to disclose information regarding the nature and extent of the disability to the Dean of Students.

Student Treatment

The University will not tolerate student mistreatment. A primary goal of Mercy Health Sciences University is the education of students who will meet the healthcare needs of society in a caring, competent, and professional manner. A profession based on the ideals of service to others should be sensitive to the humanity of its practitioners, especially during training. Insensitivity during training runs counter to the fundamental tenets of the Core Values and impairs the ability of many students to maintain their idealism, caring and compassion past training into their careers. This affects the quality of patient care as well as collegial relationships.
Examples of mistreatment include sexual harassment; discrimination or harassment based on race, religion, ethnicity, gender, sexual orientation, physical disability or age; humiliation; psychological or physical punishment; and the use of grading and other forms of assessment in a punitive manner. The occurrence, either intentional or unintentional, of such incidents results in a disruption of integrity, trust, and the spirit of learning.
Students who experience "mistreatment" should report the specific incident(s) to the offender's supervisor and to the Dean of Liberal Arts and Sciences. All incidents will be handled in an equitable manner with the guarantee of each student's rights with appropriate protection for both the complainant and accused.

Student Complaint Process

Mercy Health Sciences University places value on the right of every student to submit a complaint or concern regarding their academic experience. Complainants have the following rights:

- A complaint will be treated with appropriate confidentiality and in a timely manner.
- A complainant has the right to withdraw the complaint in writing at any point in the process.
- A complainant may file a written complaint without fear of retaliation. If the complaint is filed without basis or with the intent to harm a member of the Mercy Health Sciences University community, disciplinary action may be taken.
- The procedure will be applied consistently to students across departments/programs, including students taking online courses.

Depending upon the nature of the concern, the student should follow the appropriate procedures outlined below.

Student Feedback

A student who wishes to share feedback that is specific to a course should direct their concern to the course instructor. If a resolution cannot be reached, the student should submit their concern using the form at:

https://mchsstudentsuccess.wufoo.com/forms/m8f57uj1iw10s5/

Concerns specifically related to academic policies, e.g. a **grade appeal**, will follow the procedures outlined in the Academic Grievance Policy.

Academic Integrity Concerns
A student who wishes to submit a concern regarding an alleged violation of academic integrity by a fellow student should report the issue in writing via email to the Dean of Liberal Arts and Sciences.

Equal Opportunity Concerns
A student who wishes to file a concern regarding equal opportunity or non-discrimination is encouraged to follow the Student Complaint Process and to contact the Dean of Student Affairs to ensure proper action is taken.

Sex Discrimination and Title IX Concerns
The University does not engage in or tolerate discrimination on the basis of sex (which includes sexual harassment and sexual violence) in its education programs and activities, and the institution is committed to respond to any instance of such sex discrimination by taking prompt and effective steps to end the discrimination and address its effects. Students are encouraged to reference the full Title IX and Sex Discrimination Policy and report concerns promptly to our Title IX Coordinator for Students, Lyneene Richardson, Dean of Student Affairs. Employees of the University are asked to reference the full Title IX and Sex Discrimination Policy and report concerns promptly to the Office of Human Resources.

Campus Environment Concerns
Any member of the Mercy Health Sciences University community who wishes to submit a complaint regarding the campus environment including, but not limited to, University-wide services, student programs, counseling services, educational technology, enrollment management, or library services is to be directed via email or in person to the Provost/Vice President of Academic Affairs. The Provost will assist students in appropriate management of the complaint depending on the nature of the concern.

Concern that Due Process Was Not Followed
The decision of the Provost/Vice President of Academic Affairs is considered a final decision; however, if the student believes that due process was not followed, the student has the option of submitting a written appeal to the Provost. In the written appeal, the student must identify how due process was not followed. The Provost's findings will be communicated in writing to the student.

Potential Criminal Activity
In the case of potential criminal activity violations, the student may immediately contact Campus Safety. Campus Safety will take appropriate immediate action to ensure the safety of all students.

Non-University Options for Dispute and/or Complaint Resolution
If a student wishes to file a complaint about the institution having a substantive problem in its ability to meet the Criteria for Accreditation by the Higher Learning Commission (HLC), the regional accrediting body for Mercy Health Sciences University, the student can file a complaint with the HLC. The student can visit the HLC's webpage to see the type of complaints that the commission will review and the process involved for filing an appropriate complaint:
https://www.hlcommission.org/Students-Communities/complaints.html.

Admissions

Admission to the University

Mercy Health Sciences University shall consider any qualified person for admission to the University. Prospective students are invited to tour the campus and meet with an admissions representative, financial aid representative, and/or program representative. Mercy Health Sciences University holds admission information sessions throughout the year for prospective students, their parents, and spouses.

After receipt of an application and all official high school and college transcript(s), the prospective student's application and transcripts are reviewed for admission into the University. Admission into the University is selective and does not guarantee admission into a professional program. Each degree and certificate retains the right to set application deadlines and to limit enrollment. (*See sections for admission requirements to specific major.*)

Qualified applicants are admitted in compliance with federal and state non-discrimination statutes and the Americans with Disabilities Act. All students have equal access to the facilities. Financial aid is determined by federal guidelines.

Mercy Health Sciences University's method of communication is through email and phone calls. It is the responsibility of prospective students to keep the University Admissions Department informed of their preferred email address and current phone number for all correspondence. Students who lack email access should communicate with University Admissions staff early in the process to establish an alternate communication method. All students are provided a University email address upon enrollment which will then be used for official University communications.

Application to University Deadlines

Applications for admission to the University throughout the academic year must be received by the dates shown below *for priority consideration*. Applications arriving after these deadlines will be considered on a space available basis. Prospective students must submit all official high school and University transcript(s) for their file to be reviewed for admission to the University. If transcripts are not received, the application may be deactivated after 60 days or rolled forward to the next available academic term if requested. Admission to a specific major may have earlier deadlines. (*See sections for admission requirements to specific major.*)

Semester	Application Deadline*	Transcript Deadline
Fall Semester	July 15	August 15
Spring Semester	November 15	December 15
Summer Semester	March 15	April 15

* For priority consideration applications should be submitted by the application deadline.

Application to University Procedure

Prospective students must:

1. Complete and submit the online Application for University Admission.

2. Submit official transcripts for all institutions attended (as outlined below) to Mercy Health Sciences University. Prospective students must submit all required transcripts. If all required transcripts are not received within 60 days, the prospective student's application will be deactivated until receipt of all transcripts. Transcripts are considered official only when they are received directly from the educational institution to the University and bear the education institution's seal or the signature of an educational institution's official. Failure to report or submit all previous transcripts is considered sufficient cause for denial of an application or cancellation of admission or registration.
3. Official high school transcript from an accredited secondary school or its equivalent. For high school students enrolled in University or Advanced Placement (AP) courses, an official transcript from the University(s) attended and/or the University Board (for AP courses) should be sent to Mercy Health Sciences University. High school transcripts are NOT required for students who have completed an associate degree or higher from an accredited University or university unless it is needed to verify admission requirements for the major. (*See sections for admission requirements to specific major.*)
4. Official report of the applicant's American University Testing (ACT) scores if available.
5. Official High School Equivalency Test (HiSET) transcript or General Education Development (GED) scores (if applicable).
6. Official transcripts from each University attended (if applicable) including University coursework attempted while in high school.
7. If you have prior military service, submit a copy of the Military Discharge Form (DD214) to the Registrar's Office. If you are a Selected Reservist, submit a copy of Basic Eligibility (DD2384) to the Registrar's Office.
8. For the purpose of applying to Mercy Health Sciences University, English may be considered your primary language if you have been raised in an environment where English is an official language of your locality and nation, and English has been the primary language used in your home. Applicants whose primary language is not English must meet an English proficiency requirement in one of the ways listed below.

    - Internet-Based TOEFL (IBT): score of 71 with minimum scores of 17 in the Speaking and Writing sections.
    - Paper-Based TOEFL (PBT): score of 530.
    - International English Language Testing System (IELTS): an overall band score of 6.0 with no sub score below 5.5.
    - Pearson Test of English-Academic (PTE): score of 48.
    - American University Testing (ACT) English sub score of 18.
    - Complete the equivalent of ENG 101 and ENG 102 with a C or better at an accredited US institution where the primary language of instruction is English.

    Official TOEFL and PTE scores should be reported directly to Mercy Health Sciences University by the testing agency. (Scanned copies, photocopies, and Web results are not accepted.). For IELTS, results should be sent directly to the Office of Admissions by the testing center where you took the IELTS.

    Note for students transferring from United States postsecondary schools: Mercy Health Sciences University does not automatically waive the English requirement for students who have taken English courses at United States postsecondary institutions.

Applications will be reviewed once the Admissions Department receives all of the required documents identified above. Admissions Department personnel will determine if the criteria for admission to the University has been met. Exceptions to admission requirements stated above may be made at the discretion of the Director of Enrollment Management.

Students applying for admission may be impacted by State Authorization Laws if intending to reside outside of Iowa during the enrollment period.

Criteria for Admission to the University

(See individual degree and certificate sections for admission information and criteria for admission to specific majors.)

1. **First-time University Students** – A student who has no prior postsecondary experience attending any institution for the first time at the undergraduate level who has graduated from high school. This includes students who entered with advanced standing (University credits earned before graduation from high school). A student is also considered a first-time University student if they enroll at Mercy Health Sciences University the fall term immediately following high school graduation and earned University credit during that summer. The admission of high school students prior to graduation is contingent upon successful completion of graduation requirements with grades comparable to those upon which the admission decision was based. A first-time University student must meet one of the following:

    - Have a high school cumulative grade point average of 2.25 or higher; or
    - Have an ACT composite score of 18 or higher.

2. **University Transfer Students** - A student who has previously attended a postsecondary institution following high school graduation with at least 9 credit hours or more of postsecondary coursework. Students with fewer than 9 credit hours of postsecondary coursework will be considered for admission as a **First-time University Student** or a **High School Completion Student**. The admission of transfer students prior to completion of postsecondary coursework at another institution is contingent upon successful completion of these courses with grades comparable to those upon which the admission decision was based.

3. Must have a cumulative grade point average of at least 2.25 on a 4.0 scale at the accredited University where the most recent 9 or more credit hours were attempted.

    - **High School Completion Students** – A student seeking admission as a degree candidate who holds an equivalency diploma issued by the student's state department of education must meet one of the following:
        - Earn a General Education Development (GED) certificate; and
        - Prior to 2014, achieve a standard score of 465 or higher on the GED or
        - As of 2014, achieve a standard score of 175 or higher on the GED
        - Earn a High School Equivalency Test (HiSET) diploma; and
        - Achieve a scaled score of at least 8 out of 20 on each individual subtest and
        - Score at least 2 out of 6 on the Language Arts – Writing essay section, and
        - Achieve a total scaled score of at least 45 out of 100 on all five subtests.

    - **Home School High School Students**:
        - Provide a transcript signed by the student's academic evaluator documenting the courses taken while in home school, credit earned in each course, and letter grade achieved, reflecting a high school cumulative grade point average of 2.25 or higher; and
        - Have an ACT composite score of 18 or higher.

Admissions Department personnel will determine if criteria for admission to the University have been met. Admissions Department personnel may consider an applicant for admission utilizing

United States Department of Education recognized high school diploma equivalencies. Admission to the University does not guarantee admission to a major, professional degree and/or certificate. Upon being granted general University admission, students are encouraged to enroll in arts and science courses at Mercy Health Sciences University. Prospective students will receive an acceptance status letter from the Admissions Department after the application process has been completed.

Documented, Non-United States Citizens

In addition to University admission criteria and procedures, set forth above, non-United States citizens must:

- Submit certified copy of passport document for entry to the US.
- Submit certified copy of official USCIS document verifying Current Immigration Status (ex: refugee) or Alien Registration Number, Form I-551.
4. Submit official secondary and/or University transcripts accompanied by a certified English translation and credit evaluation prepared by a professional transcript evaluation organization.

For the purpose of applying to Mercy Health Sciences University, English may be considered your primary language if you have been raised in an environment where English is an official language of your locality and nation, and English has been the primary language used in your home. Applicants whose primary language is not English must meet an English proficiency requirement in one of the ways listed below.

- Internet-Based TOEFL (IBT): score of 71 with minimum scores of 17 in the Speaking and Writing sections.
- Paper-Based TOEFL (PBT): score of 530.
- International English Language Testing System (IELTS): an overall band score of 6.0 with no sub score below 5.5.
- Pearson Test of English-Academic (PTE): score of 48.
- American University Testing (ACT) English sub score of 18.
- Complete the equivalent of ENG 101 and ENG 102 with a C or better at an accredited US institution where the primary language of instruction is English.

Official TOEFL and PTE scores should be reported directly to Mercy Health Sciences University by the testing agency. (Scanned copies, photocopies, and Web results are not accepted). For IELTS, results should be sent directly to the Office of Admissions by the testing center where you took the IELTS.

Note for students transferring from United States postsecondary schools: Mercy Health Sciences University does not automatically waive the English requirement for students who have taken English courses at United States postsecondary institutions.

International Students

Mercy Health Sciences University is not authorized to issue Certificates of Eligibility for Non-Immigrant Students (I-20).

Undocumented Students

When completing the University application form, undocumented students may use all zeros for their social security number if they do not have one. In addition, they may indicate their country of citizenship and state "other" for current immigration status. Undocumented students may have limited eligibility for financial aid.

Holistic Admission to the University

Applicants who do not meet University admissions criteria can be reviewed for admission to the University using a holistic admission review. The holistic admissions review process will examine many factors that may support applicant admission. The holistic admission review will include, but is not limited to:

- All past academic performance
- Professional experience
- Attributes that can contribute to the mission and embody the core values of Mercy Health Sciences University

Applicants granted holistic admission will be held to all University standards set forth in the University catalog. Applicants granted holistic admission to the University are encouraged to develop an Academic Support Action Plan with the Norkaitis Student Success Center prior to the start of the first term. The holistic admission process does not guarantee admission to a specific major, professional degree, or certificate. Program admission may include additional review by the program chair or academic leadership.

Readmission to the University after Voluntary Leave

Applicants wishing to provide additional documentation for consideration may speak with their admissions counselor or the Director of Admissions.
Students who are not enrolled at Mercy Health Sciences University for a period of three (3) or more consecutive semesters must reapply for admission to Mercy Health Sciences University and will be evaluated according to existing admission criteria. The catalog under which a student is readmitted to the University will govern the graduation requirements for that student. Readmission to the University does not guarantee admission or readmission to an academic major, minor, or certificate.

Readmission to the University after Academic Disciplinary Dismissal

Students who have been dismissed for disciplinary or academic reasons may petition for readmission to the University. The Petition for Readmission is submitted to the Student Affairs Office. Readmission to the University will be based on the completed petition, personal statement, transcripts, and other supporting documents to assist in the readmission process. Students who wish to return following dismissal from the University for academic or disciplinary reasons must petition the Student Academic Progression Committee at least 30 days before the beginning of the term in which enrollment is desired. A Petition for Readmission Form is available through the Student Affairs Office. The Student Academic Progression Committee will evaluate written petitions using the criteria listed below and determine, on a case-by-case basis, whether or not to grant readmission to the University.

- Educational goal(s)
- Past academic difficulties and/or disciplinary actions and the steps taken to address these difficulties
- If dismissed for academic issues, evidence that indicates academic performance will be better than before dismissal and evidence of ability to perform at the required academic level
- Specific plans for assuring academic success

The student may also include:

- Letters of recommendation from faculty members or other sources knowledgeable about the student's situation and the student's ability to be academically successful.

Students who were academically dismissed and have since earned a degree at an accredited University may be considered for University admission without petitioning for readmission. These students should follow the Application to University Procedure.
Readmission to the University does not guarantee readmission to a major. The student must meet all admission requirements for the specific academic major and apply for the major if readmitted to the University. Students who are expelled from the University may not be readmitted.

After Admission to the University

Once applicants have been notified of their admission to the University, the applicant must:

- Attend a New Student Orientation and Registration session. Students have the option to complete their orientation online.
- Complete the Emergency Notification and Communications, Multiple Consent Agreement, FERPA Release (if applicable) and Request to Prevent Disclosure of Directory Information forms during the session.

Postsecondary Enrollment Options Program for High School Students

The Postsecondary Enrollment Options Program is open to only eligible students as that term is defined by Iowa Law. Not all courses offered by Mercy Health Sciences University may be taken through the program. Interested students must work through their respective school district. Interested students will find additional information in: (i) their district's student registration handbook, (ii) Iowa Code Chapter 261E and (iii) Iowa Administrative Code Section 281, Chapter 22.

Conditional Admission to the Major

Applicants who are admitted to Mercy Health Sciences University that do not satisfy all the requirements to be admitted to their major of interest may be conditionally admitted to the major. Upon the completion of all required prerequisites and the receipt of official transcripts, a determination will be made on whether the student is fully admissible to the major. Students who fail to qualify for full program admission by the drop date, as identified in the academic calendar, will be dismissed from the program. Not all majors offer conditional admission.

Transfer Credit

Mercy Health Sciences University accepts courses offered by accredited institutions of higher learning. For course work completed at a non-accredited institution, the recommendations by the American Association of Collegiate Registrars and Admission Officers (AACRAO) or the American Council on Education (ACE) will be used. Transfer credits will be considered on a case-by-case basis at the discretion of the Registrar's Office and the discipline appropriate faculty as needed.

Credit may be granted for a combination of relevant work completed in (a) University-level non degree, extension or correspondence courses offered through an accredited collegiate institution that accepts the credit for its own degree or (b) courses satisfactorily completed in non-collegiate organizations that are recommended at the baccalaureate level by the American Council on Education.

The University does not restrict the number of credits that may be transferred; however, students must meet the minimum residency requirements in effect at Mercy Health Sciences University to receive a degree. Courses accepted as transfer credit will apply toward degree requirements or to general education requirements, and must be of comparable content and length to Mercy

Health Sciences University courses. A minimum grade of "C" (not C-) is required for transfer credit. Transfer grades are not used to calculate Mercy Health Sciences University cumulative grade point average (GPA). Credit from two-year institutions may not substitute for upper division credit unless approved by the major/program chair.

Mercy Health Sciences University honors the Iowa Community College Associate of Arts (A.A.) and Associate of Science (A.S.) articulation agreements. Admitted students with an A.A. or A.S. degree from an accredited institution who have at least 60 semester credits acceptable for transfer will enter the University having fulfilled the general education requirements with the exception of the Servant Leadership course. In addition, admitted students with a Bachelor's degree from an accredited institution will enter the University having fulfilled the general education requirements with the exception of the Servant Leadership course.

Credit for Prior Learning

Mercy Health Sciences University accepts 40 credits of prior learning for RN to BSN students who have an active unencumbered RN license to satisfy RN to BSN undergraduate degree requirements.

Credit by Examination

Mercy Health Sciences University ensures its academic integrity by awarding credit only for successful completion of a University-level course or for specified examination programs. The total combined examination credits cannot exceed 24 credit hours. University Level Examination Program (CLEP), DSST (formerly known as Dantes Subject Standardized Test), Advanced Placement (AP), and Challenge Examination may not be taken as a prerequisite to a course a student is taking. A Credit by Examination Test may not be taken to replace a failed course.

Advanced Placement (AP) Program

The AP program involves students completing college-level courses during high school and then taking standardized tests to assess whether college-level learning has occurred. Mercy Health Sciences University will award credit hours through AP programs provided that the student achieves a rating of at least a "three" (equivalent to a grade of "C") on each test for which credit is desired. Official AP transcripts must be requested by the prospective students from www.Universityboard.org and sent directly to Mercy Health Sciences University.

Challenge Examination

Students who believe they are knowledgeable in certain subject areas and wish to receive college credit for this knowledge, may challenge the course by sitting for the Challenge Examination. Not all courses at Mercy Health Sciences University are available for students to challenge. If a CLEP exam is available for a course, the student may only take the CLEP exam and may not challenge the course. Mercy Health Sciences University will award credit hours through Challenge Examinations provided that the student achieves at least 80 percent on the test in question. The student must pay the Challenge Examination fee prior to taking the Challenge Examination.

University-Level Examination Program CLEP and DSST

Examinations offered through CLEP and DSST (formerly known as DANTES subject standardized tests) are based upon material that is taught in introductory-level college courses. Mercy Health Sciences University will award credit hours through CLEP and DSST provided that the student achieves a scaled score equivalent to a "C" on each test for which credit is desired. Students are encouraged to contact the Registrar for a current listing of CLEP and DSST examinations and

the corresponding scaled scores for which the University will award credit. Official transcripts must be requested by the prospective students from www.Universityboard.org for CLEP transcripts or www.getUniversitycredit.com for DSST transcripts and mailed directly to Mercy Health Sciences University.

Transfer of Coursework Complete Outside of the United States of America

To receive credit for coursework completed outside of the United States of America (U.S.A.), the student must have the transcript evaluated by a transcript evaluation agency in the U.S.A., at the student's expense. The evaluation must be completed on a course-by-course level. Evaluation by a transcript evaluation agency provides a guide for evaluating international course work; however, Mercy Health Sciences University retains the right to determine transferability of courses and degrees. Students may need to provide Mercy Health Sciences University with additional information about coursework, if requested. To receive transfer credit for English composition, international students must take an equivalent course from an accredited institution in the United States. In some cases, transfer credit can be granted if the course work is transcribed by a college or university in the U.S.A. that sponsored the study abroad or semester at sea experience, but this situation will be evaluated on a case-by-case basis.

Non-Degree/Guest Student

Students wishing to take courses for academic credit, but do not wish to seek a degree/certificate, are welcome to enroll for non-clinical classes at Mercy Health Sciences University on a space available basis. Non-degree students may also be referred to as non-degree, guest, or unclassified students. These students must complete the online Non-Degree/Guest Student Application. They also need to complete a Student Registration form and submit it to the Registrar's Office. Transcripts are not required; however, completion of prerequisite courses may be verified. A maximum of 30 credit hours may be earned as a non-degree student. All non-degree students are encouraged to attend a New Student Orientation and Registration Session. Non-degree seeking students are not admitted to Mercy Health Sciences University and are not eligible for financial aid.

All course prerequisites and University policies apply to non-degree seeking students. Non-degree seeking students are held to the same academic and behavior standards as degree-seeking students. Non-degree seeking students will pay the regular University tuition and fees and a transcript and grade are generated.

Non-degree seeking students may seek admission to the University and to a degree/certificate at any time. They must complete an application for admission and meet the criteria for admission.

Orientation and Professional Program Days

New Student Orientation, Registration Session and Professional Program Day

All new students to Mercy Health Sciences University are required to attend an Orientation and Registration session prior to their first semester. The session introduces students to University life, provides information about services and resources, and teaches skills for student success. Students may register for their first semester classes at this time. If required by majors, students who are admitted to an academic major are required to attend Professional Program Day prior to the first course taken in their major. For online degrees and certificates, orientation and Professional Program Day may be offered in an online format.

Financial Information

The current list of tuition and fees, including amounts is located on the University website (www.mchs.edu/tuition). Mercy Health Sciences University reserves the right to change tuition and fees as appropriate.

Financial Assistance

Federal and State Programs

Federal financial aid programs are available to qualifying students enrolled in any Mercy Health Sciences University associate or bachelor's degree and qualifying certificate programs. State funds may be available for degree-seeking students who qualify.

Many forms of financial aid (including, but not limited to those listed below) are tied directly to the Free Application for Federal Student Aid (FAFSA). Students and their spouses or parents must complete this application to qualify for financial aid at www.studentaid.gov. Mercy Health Sciences University's Financial Aid Office will receive the FAFSA information electronically from the Federal Government provided the student uses Mercy Health Sciences University's school code (006273) when completing the FAFSA.

Iowa Tuition Grant

Eligibility for the Iowa Tuition Grant is based on financial need. Recipients must be residents of Iowa as defined by the Iowa State Board of Regents, be pursuing an associate or bachelor's degree, submit their FAFSA by July 1, and meet the Expected Family Contribution (EFC) determined by the Iowa University Student Aid Commission. (*Subject to funding*)

Pell Grant

The Pell Grant is a federal grant awarded to students with high financial needs. Pell grants are not awarded to individuals who have previously earned a bachelor's degree.

Stafford Loans

Eligibility for a Federal Stafford Loan is determined after grants and scholarships are awarded to the student. For current interest rates, origination fees, and other loan information, visit www.studentaid.gov.

The Stafford Loan program enables the student to borrow funds directly from the U.S. Department of Education. Maximum loan amounts vary based on grade level and dependency status as determined by the FAFSA. In order to comply with federal law, students are required to complete entrance counseling prior to borrowing a Stafford Loan.

Subsidized Stafford Loans are interest-free during the time the student is in University. Repayment begins six months after graduation, withdrawal, or if the student drops to less than half-time enrollment.

Unsubsidized Stafford Loans can be obtained by eligible students regardless of financial need. For unsubsidized loans, payment of both the principal and interest may be deferred until after graduation or withdrawal from University, but interest begins to accrue at the time the loan funds are disbursed. Repayment obligations are the same as the federal subsidized loan. Students are able to view the entirety of their federal loan history and lender information through the Department of Education's website.

Supplemental Educational Opportunity Grants

A Supplemental Educational Opportunity Grant (SEOG) is for students with exceptional need and gives priority to students who receive Pell grants and file the FAFSA by July 1. (*Subject to funding*)

Work-Study Program

The Federal Work-Study Program provides financial assistance to students demonstrating financial need. Work-study positions are limited and subject to availability and financial need. Refer to FinancialAid@mchs.edu for details.

Veteran Educational Benefits

Mercy Health Sciences University degrees and certificates are approved by the Iowa Department of Education for education benefits administered by the U.S. Department of Veterans Affairs (VA). Veterans or eligible dependents planning to enroll at Mercy Health Sciences University should apply for VA benefits at the time of admission to Mercy Health Sciences University. Please contact the Registrar's Office at Registrar@mchs.edu with questions or for necessary forms. A Benefit Application can also be completed online at www.va.gov. The application process for new claims takes a minimum of eight weeks to complete by the VA.

Mercy Health Sciences University participates in both the Yellow Ribbon Program and the Military Spouse Career Advancement Accounts (MyCAA) Program.

Packaging for Federal and State Financial Aid

1. Priority consideration will be given to admitted students who have submitted their FAFSA by July 1.
2. Pell Grants, Iowa Tuition Grants, and external scholarships and grants will be applied first. Institutional funds and loans are applied next according to need.
3. In the event that a student receives additional funds from outside sources, it is the student's responsibility to notify the Financial Aid Office. Reductions or adjustments in previously packaged assistance may result.
4. Withdrawal from the University or dropping of a course may result in the adjustment of a student's financial assistance package. This may result in a balance owed to either the University or the U.S. Department of Education. The student should discuss the potential impact of such a decision with the Financial Aid Office prior to making schedule changes.
5. To receive financial aid, a student must be admitted to Mercy Health Sciences University and be pursuing a qualified academic degree or certificate.
6. Financial Aid is initially awarded based on projected enrollment status, which is typically full-time. This may vary based upon program of study or course availability, so please contact the Financial Aid Office with questions.
7. If a student is taking academic credits at another institution while attending Mercy Health Sciences University, the student is responsible for providing appropriate documentation.

Employer Tuition Assistance Programs

Many employers provide tuition support to encourage employees to pursue additional education. Mercy Health Sciences University encourages all students to contact their human resources department to learn what options are available to support their education goals.

Trinity Health Tuition Reimbursement – Employees eligible for Trinity Health benefits may be eligible for Trinity Health tuition reimbursement and/or tuition assistance. These are Trinity Health

programs and you must refer to the Trinity Health Human Resource Ministry-Wide policies and procedures published and maintained on Sharepoint for all details.

Satisfactory Academic Progress (SAP) Standards for Financial Aid

Students receiving federal and/or state funded aid at Mercy Health Sciences University are required to maintain satisfactory academic progress (SAP) towards a degree during their enrollment. SAP measures both a qualitative and quantitative component and is achieved when a student maintains both the required grade point average and completion rate.

Please note: This is a different policy than the University Academic Performance Policy.

Qualitative Measure:

- Cumulative Grade Point Average (GPA)
    - Undergraduate students are required to maintain a 2.00 cumulative grade point average (GPA).
    - Graduate students are required to maintain a 3.0 cumulative grade point average (GPA).

Quantitative Measure:

- Completion Rate/Pace of Completion
    - Students must complete (with a D- or above) 67% of cumulative attempted credit hours applied to their degree or certificate including all courses taken at Mercy Health Sciences University. [This policy applies only to financial aid considerations. Students must earn a C or higher to pass a course at the University.]

- Attempted Hours Include the credit hours for:
    - All courses taken at Mercy Health Sciences University with an awarded grade of D- or better.
    - All courses taken at Mercy Health Sciences University with a grade of F, W, or I
        - All Repeated courses
    - All Transfer courses accepted and applied toward a Mercy Health Sciences University degree

Incomplete Grades ("I"):
Qualitative Measure Impact: Incompletes are treated as a failing grade in the cumulative GPA. If a different letter grade is later given for the course, it is the student's responsibility to notify the Office of Financial Aid so the academic progress may be reassessed.
Quantitative Measure Impact: Incomplete courses are treated as attempted courses.

Withdrawals ("W"):
Qualitative Measure Impact: Withdrawals are treated as a failing grade in the cumulative GPA.
Quantitative Measure Impact: Withdrawals are treated as attempted courses.

Repeated Coursework:
Qualitative Measure Impact: the most recent grade received (not the highest grade received) will be used in the calculation of the cumulative GPA.
Quantitative Measure Impact: Each time a course is taken, the credits will count as attempted credits.

Transfer Credits:
Qualitative Measure Impact:
We do not include transfer credit grades in our GPA calculation.

Quantitative Measure Impact: Transfer credits that are accepted and applied toward a Mercy Health Sciences University degree plan are treated as an attempted credit.

Maximum Timeframes:

The federal government defined the maximum timeframe as 150% of your program's published length, as measured in credit hours. For example, a degree that requires 63 credit hours would result in a maximum timeframe of 94.5 credit hours (63 x 150%).

- Students must complete their program of study within a maximum timeframe as measured in attempted credit hours.
    - Please see "Attempted Hours Included" above for list of what hours are counted in this calculation.
- Students cannot receive financial aid for any coursework beyond 150% of the credits required for their specific program.
- If it is deemed mathematically impossible to complete the degree within the maximum timeframe, federal financial aid will end at that time.
- If a student changes majors, all attempted credits will count towards the 150% maximum timeframe policy.
    - Appeals for the 150% period will be allowed on a case-by-case basis. Please contact the Financial Aid Office for details.

Evaluation Period:

- The SAP policy will be evaluated at the end of each academic term (semester or quarter) to determine a student's eligibility for financial aid for the subsequent term. The evaluation will be completed within 7 business days of the end of the academic period.

Notification:

- Students will be notified of their SAP status within 7 business days after the end of the evaluation period. Notifications will be sent via student email or other designated communication channels as requested.
-

Financial Aid Warning & Suspension:

- **Financial Aid Warning:**
    - Students who do not meet the GPA and/or the 67% completion rate requirements will be placed on Financial Aid Warning for one semester.
    - Students will continue their financial aid eligibility during the warning semester.

- **Financial Aid Suspension:**
    - After the warning semester, students who do not meet SAP policy requirements will be placed on Financial Aid Suspension.
    - Students on Financial Aid Suspension *lose their financial aid eligibility* until the SAP requirements are met.

Appeal Process:

A student may appeal the Financial Aid Suspension by submitting an appeal to the Office of Financial Aid.

- **Submitted an Appeal:**
    - Student must complete the SAP Appeal Form and include:
        - Student narrative in writing, noting extenuating circumstances, such as the death of a family member or an illness or injury to the student if applicable. Includes supporting documentation.
        - Information regarding why the student failed to make SAP, and what has changed in the student's situation that will allow the student to demonstrate SAP after the next academic term of enrollment.

        - Academic Plan of Study signed by their Academic Advisor

- **Financial Aid Appeals Committee**:
    - The Financial Aid Appeals Committee will review the appeals and make a determination based on merits of each individual case.
    - All decisions by the Financial Aid Appeals Committee are FINAL.

Regaining Aid Eligibility:

- Students who have lost eligibility for financial aid may regain it by meeting SAP requirements during subsequent evaluation periods.

Once the requirements are met, the student will regain financial aid eligibility for the following term.

Scholarship Programs

Mercy Health Sciences University and donor designated scholarships are available for students to apply twice per year. Scholarship information, the application form, and the scholarship application dates are available on the Mercy Health Sciences University Scholarship webpage. Applications must be submitted utilizing the application form and within the specified scholarship application dates.

Applicants are able to submit a single application for multiple scholarships. A list of available scholarships as well as the forms to be used in the scholarship application process can be found online at www.mchs.edu/scholarships.

In many cases, documentation of financial need is required and will be validated using data authorized for release from the applicant's Free Application for Federal Student Aid (FAFSA). Failure to file a timely FAFSA for scholarship application deadlines that require such documentation will result in limited opportunities. Students receiving scholarships will be recognized in the community through publicity generated by the University. Students concerned about their confidentiality should contact the Financial Aid Office at the time of the award to discuss planned announcements.

Return of Title IV Funds

If a student withdraws from all classes or is dismissed from the University prior to completing 60% of the term, federal law requires a portion of federal Title IV financial aid received by an institution of higher learning to be returned to the government. A proration calculated by using the student's date of withdrawal is used to determine the amount of aid a student has earned prior to the 60% mark of the term. A student who earns a 0.0 term GPA (receives all F and/or W grades) in all classes for the term would have the proration calculation based on the last day of attendance if they do not attend the entirety of the term.

Calculation of aid earned and return of financial assistance (federal and state aid) is prorated following regulations. Contact the Financial Aid Office for more information.

Students will be notified if they are required to repay federal or state funds (grants and/or loans) within 30 days from the day that the University is made aware of the withdrawal or dismissal. Failure to repay or make satisfactory payment arrangements will result in the student becoming ineligible to receive Federal Title IV funds at any institution.

In addition, if the University is required to return any unearned portion of Title IV funds that have been used to pay tuition, any outstanding balances due Mercy Health Sciences University resulting from such a return of Title IV funds will be the personal responsibility of the student. Repayment arrangements must be made with the Mercy Health Sciences University Business Office.

Payment and Refund Policies

Payment of Tuition and Fees

Full Payment of all tuition and fees must be made by the first day of each term for all for-credit classes. The University utilizes MyMercy (which can be accessed via our website) to provide an electronic bill. The University strives to generate an electronic bill for each student approximately one month prior to the start of the term. Paper bills may be sent at the discretion of the University or upon the Business Office receiving a request from the student. The student has the obligation to contact the Business Office if an electronic bill is not available in MyMercy or if a paper bill is not received after the student has made a request. Failure to receive a bill does not exempt any student from the obligation to make Full Payment by the due date.

Full Payment occurs when: (i) the University has received an approved method of payment (set forth below) equal to the amount due or (ii) a Completed Financial Arrangement (applicable only to student enrolled in for-credit courses) has been made by the student. Full Payment must occur before a student may attend class.

In order for an arrangement to be considered a Completed Financial Arrangement: (i) it must be sufficient to pay the entire amount due, (ii) each requirement that must be met to receive a loan, scholarship and other aid must be satisfied, (iii) the entity issuing or awarding the loan, scholarship or other aid must have issued its final approval and (iv) the University must have received the funds or receive confirmation from the issuing entity that the funds will be paid to the University.

Pursuant to the Veterans Benefits and Transition Act of 2018, codified at **38 USC §3679(e)(1)**, Mercy Health Sciences University shall not impose upon any student who is a covered individual (as the term is defined in 38 USC §3679(e)(2)) any penalty including: (i) late fees or (ii) the denial of access to classes, libraries, or other institutional facilities or require a covered individual to borrow additional funds, because of the individual's inability to meet a financial obligation to the institution due to the delayed disbursement of a payment by the Secretary of Veterans Affairs under chapter 31 or 33 of Title 38 of the U.S. Code. When delayed disbursement of a payment occurs, a student who is a covered individual shall be allowed to attend and participate in the course of education during the period beginning on the date on which the individual provides to the educational institution a certificate of eligibility for entitlement to educational assistance under chapter 31 or 33 of Title 38 of the U.S. Code and ending on the earlier of: (i) the date on which the Secretary of Veterans Affairs provides payment for such course of education to such institution, or (ii) the date that is 90 days after the date on which the educational institution certifies for tuition and fees following receipt from the student such certificate of eligibility.

Failure to make *Full Payment* by the due date will result in a late payment charge being assessed. Also, students who have not fulfilled their financial obligation may be dropped from all classes. At the University's discretion a student may be reinstated, if the financial obligation is fully satisfied and the reinstatement and late fees are paid by the student within the time specified by the Vice President, Business and Regulatory Affairs.

Full Payment of all tuition and fees for non-credit classes is due at the time of registration. Registration must occur before the first day of class. Because payment is due at the time of registration, students will not have an electronic bill in MyMercy. The student should contact the Business Office with any questions regarding Full Payment. The student should contact the Director of Continuing Education with any questions regarding registration.

Approved Methods of Payment

Mercy Health Sciences University has the following approved methods of payment: cash, check, money order, electronic fund transfer and VISA, MasterCard and Discover credit and debit cards. Payment by credit and debit card may be made in person, by telephone, online or by mail. When paying by check, students are encouraged to remit payment the week before each term in order to avoid lines and delays. It is the student's responsibility to request a receipt.

NOTE: Any student who elects to pay tuition and/or fees with a credit or debit card either in person, over the phone or online will incur a service fee equal to the greater of 2.55% of the transaction amount or $1.00. As an example, a VISA card transaction in which a tuition payment of $1000 is made will incur a service fee of $25.50, causing the total VISA card transaction to be equal to $1025.50. The service fee is charged by the e-commerce service provider, not Mercy Health Sciences University. All service fee charges are retained by the e-commerce service provider and no portion of the fee is shared with or paid to Mercy Health Sciences University. Mercy Health Sciences University encourages all students to pay with a check (electronically, by mail, or in person) to avoid paying a service fee. Any questions regarding credit card and debit card payments should be directed to the Mercy Health Sciences University Business Office.

Tuition Adjustment Policies

If a student drops a class or classes or withdraws from the University, it is possible under certain circumstances that the tuition and fees charged by the University to the student will be adjusted. In some circumstances, a student may be entitled to a direct refund. In other circumstances, the proceeds from a loan, scholarship or other aid will be sent back to the issuing entity by the University. Tuition adjustments are dependent upon many factors, including but not limited to the date of the change, course load, enrollment status, credit hours, method of payment, and type of class (i.e. For-credit Classes or Non-credit Classes). For-credit Classes include only those courses identified as Special Departmental Courses and General and Professional Education Courses in the Course Descriptions Section of the Catalog and which follow the Regular Tuition section of Appendix A to the Catalog. Non-credit Classes are all classes not meeting the definition of For-credit Classes. A student should not assume a tuition adjustment will be necessary and proper. Questions concerning tuition adjustments should be brought to the attention of the Business Office.

Dropping Classes

Dropping is defined as ending enrollment in one or more classes during a term, but continuing enrollment in other classes during that same term.

The University allows students to drop classes within the following time frames and to receive a tuition adjustment for an amount equal to the full cost of the class or classes that have been dropped. The Session Start Date is set forth each term in the Course Schedule published on the Mercy Health Sciences University Website (unless otherwise identified, for most classes this date is the first day of the term). In order to meet the deadline, the student must submit all paperwork to the Registrar's Office before the end of the day specified below.

Classes running 12 weeks or longer	7 calendar days from the Term Start Date
Classes running less than 12 weeks	3 calendar days from Session Start Date
Non-credit Classes	On or before the first day of class

Tuition is considered fully earned by the University after the above time frames have passed and therefore tuition will not be adjusted for any class dropped after the respective time frame set forth above.

Dropping Non-credit Classes

Tuition is non-refundable if the drop occurs after the first day of class. Therefore, a student who wishes to drop a non-credit class and be eligible to receive a tuition adjustment must submit all completed paperwork to the Registrar's Office on or before the first day of class.

Withdrawal from the University

Full Adjustments

Withdrawing from the University is defined as ending enrollment in all classes during a term. A student officially withdraws from the University on the date the Registrar's Office receives formal written notice of the withdrawal from the student. Please refer to the Academic Policies Section of this Catalog or consult the University Registrar to answer questions related to academic credit. Please refer to the Admissions Section of this Catalog or consult the University Admissions Department to answer questions related to readmission.

The University allows students to withdraw from the University within the time frames identified below and to receive a tuition adjustment for an amount equal to the full cost of tuition. The Session Start Date is set forth each term in the Course Schedule published on the Mercy Health Sciences University Website (unless otherwise identified, for most classes this date is the first day of the term). In order to meet the deadline, the student must submit all paperwork to the Registrar's Office before the end of the day specified below.

Classes running 12 weeks or longer	7 calendar days from the Term Start Date
Classes running less than 12 weeks	3 calendar days from Session Start Date
Non-credit Classes	On or before the first day of class

Students who withdraw from the University must complete a University Exit form and submit it to the Registrar's Office. (*Please refer to the Financial Information Section of this Catalog for information on Tuition Adjustment Policies*.)

Students wishing to withdraw will be considered for readmission according to the readmission policies.

Prorated Adjustments

Any student taking classes for credit (excluding Paramedic classes) who withdraws from the University after the above deadlines and up to the 60% mark of the term will have a tuition adjustment calculated on a prorated basis. The date the Registrar's Office receives formal written notice of the withdrawal will be the date proration is based upon. Tuition is considered fully earned after 60% of the term has elapsed and therefore tuition is non-refundable for all withdrawals after that date.

Paramedic students who withdraw from the University later than 7 calendar days from the Session Start Date are not eligible for an adjustment to tuition. All tuition and fees are 100% earned at the end of the 7th calendar day.

Non-credit courses are not eligible for prorated tuition refunds. All tuition is considered fully earned at the end of the first day of class.

Additional information related to the Federal guidelines for refunding disbursed Title IV Funds are found in the section entitled "Return of Title IV Funds."

Iowa National Guard and Reserve Forces of the United States – Consistent with Iowa Code 261.9(1)g, any student who is a member of the Iowa National Guard or Reserve Forces of the

United States who is ordered to national-guard duty or federal active duty may during the term in which the student is ordered to duty select one of the following three options:

5. The student may withdraw from the University and receive a full refund of tuition and mandatory fees for that term.
6. The student may make arrangements with the University to complete all courses at a later date. The student will receive an incomplete grade for each course. If the student elects this option no adjustment to tuition and fees will occur.
7. The student may make arrangements with the University to complete some courses at a later date. If the student elects this option, the student must withdraw from all courses that will not be completed at a later date. The student will receive an incomplete grade for each course in which the student remains enrolled. The tuition and mandatory fees associated with each course that will not be completed at a later date will be refunded to the student.

If a member of the Iowa National Guard or Reserve Forces of the United States who is ordered to national-guard duty or federal active duty and has a dependent child and a spouse who is a student at Mercy Health Sciences University, then the spouse may also take advantage of the above options during the term the member is first ordered to duty. In order to take advantage of any of the options, the student must provide the University with a copy of: (i) the Internal Revenue Service tax filing for the previous tax year showing the member claimed a child as a dependent, (ii) the marriage license or certificate identifying the names of the member and the student and (iii) the official military document ordering the student's spouse to national guard duty or federal active duty.

Non-completion due to Unavoidable Circumstances

Non-credit Classes – No refunds or tuition adjustments will be made. However, if the student is unable to complete the course due to unavoidable circumstances a written application should be submitted to the Vice President, Business and Regulatory Affairs within 15 days of the last date of attendance which clearly describes the circumstances and why the circumstances were unavoidable and why those unavoidable circumstances make it impossible for the student to complete the course(s). The application will be reviewed by the Vice President, Business and Regulatory Affairs, the Dean of Liberal Arts and Sciences and the instructor of the class or classes. If the application is approved, the student will be allowed to re-enroll in the class or classes from which the student was unable to complete at 50% of the then current cost if the student re-enrolls in the class within 6 months of the date the application is submitted. After 6 months, the benefit is lost. This benefit is only available one time per student. For students, whose application is approved, a grade of "W" will be recorded. For students who application is not approved, the student will receive the grade earned as determined by the instructor(s).

Unpaid Tuition Due to the Return of Federal, State or Private Aid

When a student withdraws from the University or is dismissed from the University prior to completing 60% of the term and all or a portion of the student's aid must be returned (**see** Financial Assistance Section above) to the agency or organization issuing the aid, this may create a situation in which the student has unpaid tuition owed to the University. Students will be required to pay all unpaid tuition and fees in full in order to enroll in classes which start after the withdrawal or dismissal date or to receive their transcripts, degree or diploma. Failure to pay may result in the student being sent to a collection agency. Students should seek input from a representative of the Financial Aid Office or Business Office prior to withdrawing.

Non-credit Class Information

Payment of all tuition and fees for non-credit classes is due at the time of registration. Registration must occur before the first day of class. Tuition is non-refundable after the first day of class. Installment payment plans are not offered by the University for these classes. Students are not considered registered until payment is received. If a student is unable to attend any class, the student has a duty to contact the instructor prior to the class to discuss the matter. If a student fails to attend the first class and has not contacted the instructor prior to the class to obtain permission, the student will be administratively dropped from the class by the University and the amount paid by the student will be refunded.

Non-credit versus Credit Election for EMT Classes

Each student may elect to enroll in the EMT Classes and receive University credit. The election to take the class for University credit must be made by the student at the time of registration. Once class has started this choice is irrevocable. If a student elects to enroll in the class for University credit, the business-office policies which normally govern EMT Classes are not applicable. Instead, all for-credit policies, including tuition and fee amounts will apply.

Collection

Any time a student develops a past-due balance, the account will be placed on Business Office hold and the student will be unable to obtain grades, transcripts, or register for other classes until the past due balance is paid in full. Any time an amount is past due, the University may elect at its full and complete discretion to send the student's account to a collection agency. Any collection costs incurred by the University may be charged to the student's account.

Due Dates for Tuition and Fees

Full Payment (as the term is defined above) of tuition and fees for all for-credit degrees, certificates, and courses offered by the University is due on or before the first day of each term. Please consult the University calendar to determine the first day of the relevant term.

Excess Payments

If a student account has a credit balance a refund to the student will be issued unless the student requests that the credit be applied towards future obligations. Refund checks will be made available for students the later of, 14 days after the funds are received by the University or 14 days after the first day of the term. A student who has received federal or state aid has agreed through the application process that funds will be used solely for education-related expenses.

Student Affairs

Norkaitis Student Success Center

The Josephine Norkaitis Student Success Center (SSC) provides students with opportunities to enhance their education through academic advising, career development, personal counseling, tutoring services, and testing accommodations for students with a disability, and other academic support services. The SSC is designed to provide free services to help students who may need additional support during their academic experience. For more information about services housed under the Student Success Center, visit: https://www.mchs.edu/Academics/Campus-Services/Student-Success-Center

Student Handbook

The undergraduate *Student Handbook* is a vital resource containing necessary student information regarding student expectations, policies, procedures, and general campus information. Students are responsible for reading and adhering to the information in the *Student Handbook* and must abide by the policies and procedures within it. Questions about information in the *Student* Handbook should be directed to the Dean of Student Affairs located in the Norkaitis Student Success Center. The *Student Handbook* is available at www.mchs.edu/students.

Additional program-specific information and policies are found in the respective program handbooks. Students are responsible to adhere to the policies in both their program handbook and student handbook.

Student Resources

Student Communication Tools

MyMercy

MyMercy is the University's online tool for viewing academic and administrative records. This student information website allows students to access their accounts, schedules, grades, unofficial transcripts, course and degree planning tools, financial aid information, registration, and other tools that facilitate their enrollment and progression.

Online Learning Management System

Canvas is the University's learning management system for courses that utilize technology and may also be offered in blended and online formats.

Student Email Account

All students are provided a Mercy Health Sciences University email account. This email account is the official method for the University to communicate with students. Students are expected to check their University email accounts on a regular basis.

Library Resources

The Mercy Health Sciences University Library provides the University community instructional consultation, research support, and access to information to promote lifelong learning and infuse opportunities to develop information literacy throughout the University experience. The library provides reference assistance, research help, and information literacy instruction to individuals and groups. Email library@mchs.edu or connect with library staff via text or chat to consult with a librarian. The Mercy Health Sciences University Library provides a collection of print, audiovisual, and electronic resources to support the coursework and research of students,

faculty, and the wider community. Access to online resources is available through the library website (https://www.mchs.edu/Students/Library) and through each course's online classroom. Interlibrary loans offer access to millions of articles held by libraries worldwide. Students also have access to materials at more than 600 libraries across the state through the University's participation in Iowa's Open Access Program.

Campus Ministry

Campus Ministry provides opportunities where students and faculty/staff are offered a variety of ways to explore, challenge, develop and live out their faith. Rooted in the heritage of the Sisters of Mercy, Campus Ministry promotes the institution's Catholic Christian values unifying the community with retreats, service, friendship and prayer. Located in Brennan Hall, Campus Ministry offers a warm and welcoming place where members of the community gather to share stories, reflect on their spirituality, and seek support and pastoral guidance.

Campus Ministry's programs are inclusive of all faith backgrounds and designed to make every student, faculty and staff member feel comfortable and welcome in the University community. Whether experiencing a retreat activity, a community-building event, participating in one of the community service projects or praying together in the chapel, Campus Ministry offers opportunities to explore one's spirituality and develop one's faith.

Rooted in the heritage of the Sisters of Mercy, Campus Ministry aims to offer programming that reflects the diversity of our campus community, while maintaining the institution's Catholic Christian values. Campus Ministry provides opportunities where students and faculty/staff can connect, share faith, and seek support and pastoral guidance. Campus Ministry offers a weekly Mass and interfaith prayer service. Additional programs are promoted on digital kiosks around campus. To connect with our Campus Minister, email mission@mchs.edu.

Student Organizations

For more specific information, please refer to the Student Organization link on the University's website: https://mchs.edu/Experience/Student-Clubs-Organizations or see the University Student Handbook: at www.mchs.edu/students

Housing Options

Students in need of housing may find housing wherever they desire. Students may wish to consider the following options which are not owned or operated by Mercy Health Sciences University.

College Hill – This student apartment option is located at 921 6th Ave, Des Moines Iowa. University Hill offers multiple apartment options. Contact Newbury Living at: http://www.newburyliving.com/ for more information on student apartment options across from campus.

Drake West Village – Students interested in a more traditional student housing option may wish to consider Drake West Village, 1315 31st Street, Des Moines, IA 50311. This facility is adjacent to Drake University and offers apartment-style housing to students from Drake University, Des Moines University and Mercy Health Sciences University. Contact Drake West Village by visiting the web at www.drakewestvillage.com.

Child Care Resources

Students in need of child care resources should consult the Community Resource Guide by visiting https://mchs.edu/Students.

Academic Policies & Procedures

Student Classification

Classification of Students:

Freshman status:	fewer than 30 semester credits
Sophomore status:	30 to 59 semester credits
Junior status:	60 to 89 semester credits
Senior status:	90 or more semester credits

Academic Advising

Each student is personally responsible for assuring that all academic requirements for graduation are met. To assist with this task, an advisor is assigned to each student. Students need to meet with their academic advisors each semester to plan their program of study and semester schedules. The name of the student's academic advisor is listed in MyMercy.

Registration

Registration dates are listed in the Academic Calendar and students need to register during the assigned registration period. Students should meet with their academic advisor prior to registration to plan their course of study, select courses, verify prerequisites, and obtain registration approval. The academic advisor will provide students with their assigned online registration date and time. Students register for classes using MyMercy (the mobile application). Changes to their registration may be made through MyMercy until the start of the term or prior to the start date for courses that begin after the first week of the term.

Priority Registration for Student Veterans

Mercy Health Sciences University offers priority registration to students receiving veteran's educational benefits and to veterans and military members who submit appropriate documentation. This allows veterans to be among the first students to register each semester.

Veterans and dependents using veteran's educational benefits will automatically be assigned priority registration.

Students not using veteran's educational benefits, can receive priority registration by submitting proof of veteran status (i.e., DD-214, US Armed Forces Active-Duty Orders, and Military I.D. Card) to the Registrar's Office.

Once a student's military status is verified, they will remain eligible for priority registration.

Distance Education

Distance education occurs when instructional content is delivered as an online blended/hybrid course via technologies such as the Internet and audio-conferencing to communicate with students synchronously or asynchronously. Synchronous interactions may take place using live chat sessions and videoconferencing while asynchronous communications may involve E-mail, discussion boards, and feedback on submissions.

An online course is when all instruction occurs synchronously or asynchronously online through substantive and regular engagement between the student and the instructor. A blended/hybrid course is when a significant portion of instruction is delivered online while a portion of the course occurs in didactic or clinical formats. The online portion is approximately 25 - 75% of the total course. Online and blended/hybrid courses may provide increased flexibility and independence for students, but it also means that online students must learn to manage their time well, balance competing demands, and have sufficient technological skills and resources to ensure their

success in this learning environment. Successful online students are self-directed, motivated, and comfortable working with technology.

Students can take online courses from any location in which Mercy Health Sciences University is authorized to conduct educational activities (see State Authorization Reciprocity). Online and blended/hybrid courses will meet the same learning outcomes as face-to-face courses.

Technology Proficiency

Students in distance education courses are encouraged to be proficient in the following basic computer skills:

- sending/receiving email
- sending and receiving attachments via email
- using a web browser
- finding web resources through search engines
- downloading and installing software and/or viewing electronic files
- familiarity with using browser plug-ins (e.g., PDF reader, video, audio)
- using a word processing, presentation software, or other productivity applications
- experience/familiarity with a variety of file formats such as: .rtf "Rich Text Format", .doc or .docx "Microsoft Word Document", and .txt "Text document"
- the ability to be self-directed in learning new technology skills (e.g., following a handout, a step-by-step tutorial, online video help, or access to support to learn necessary skills)

Students need to check with their instructors about additional required skills for a specific course.

Portable and Laptop Computer Recommendation

Many courses at Mercy Health Sciences University require the use of computers either for online testing or other applications within the learning management system. Mercy Health Sciences University provides some computer resources, but students are encouraged to have a laptop computer to complete in-and-out of class assignments. To be successful we strongly recommend students own or purchase a Windows or Mac OS portable computer.

Note: iPads and Chromebooks are <u>not</u> supported by Mercy Health Sciences University. While they will work to access most resources, they will not work with all online and classroom electronic exam software required for exams in most courses.

RECOMMENDED STANDARD SPECIFICATIONS

- ***Specification:*** *Processor: Intel Core i5, i3, 4115Y or similar | Memory: 8GB | Storage: 128GB | Weight: Less than 3 Pounds | Battery Life: 10 - 14 hours | Screen: 13" or larger | Keyboard: Full QWERTY physical keyboard*
- ***Examples:*** *Apple Macbook Air, Dell XPS and Microsoft Surface Go Series (with added keyboard) portable computers.*

RECOMMENDED MINIMUM SPECIFICATIONS

- ***Specification:*** *Processor: Intel Processor | Memory: 4GB | Storage: 64GB Weight: Varies | Battery Life: 6 hours or greater | Screen: 11" or larger |Keyboard: Full QWERTY physical keyboard*
- ***Examples:*** *HP Stream, HP Envy and Dell Inspiron Series laptops.*
    - *Due to memory limitations, you may need to shut down extra browser windows or fully exit programs like the Microsoft Teams application Mercy Health Sciences University uses when not in use.*

Username and Passwords

Students use the same username and password for all Mercy Health Sciences University services, including MyMercy, student email, printing, and Canvas. Contact IT for assistance with username and passwords.

Learning Management System

Mercy Health Sciences University provides end-user support for instructors and students using a learning management system. Students should contact their instructor first when having a technical problem within a particular online or blended/hybrid course.

Students may leave a message with the Information Technology Support helpdesk, and the support personnel will respond during the next business period. The Information Support phone number, web-form, and support hours are listed on the University webpage.

State Authorization Reciprocity

If a student is located outside the state of Iowa while enrolled in online classes at Mercy Health Sciences University, the University must be authorized to deliver the education within the state where the student will be located. Mercy Health Sciences University complies with the authorization requirement as a participant under the State Authorization Reciprocity Agreement (SARA), an agreement among member states that establishes comparable national standards for interstate offering of postsecondary distance education courses and programs. SARA is intended to make it easier for students to take online courses offered by postsecondary institutions located in another member state. SARA is overseen by a National Council and administered by regional education compacts. The state of Iowa is a member of the Midwest Higher Education Compact. The state of Iowa became a member of NC-SARA on June 1, 2015, and assigned administrative responsibility for the program to the Iowa University Student Aid Commission.

Mercy Health Sciences University attempts to work directly with states that do not participate in NC-SARA to secure any required approvals to enable residents of those states to enroll in online degree programs. While Mercy Health Sciences University endeavors to comply with the requirements established in each state, various state conditions and fees may prohibit Mercy Health Sciences University from achieving authorization in every state.

Programs offered through Mercy Health Sciences University are designed to meet the state of Iowa's requirements for licensure or certification. Unless noted, Mercy Health Sciences University has not reviewed its outcomes as related to specific licensure or certification requirements necessary for a respective occupation or profession. It is the students' responsibility to understand the requirements of their respective state and certification exams, which may change during the duration of their program. Mercy Health Sciences University cannot guarantee a student's eligibility to qualify for exams or certifications.

Mercy Health Sciences University Distance Education Student Location Determination Policy

In accordance with the State Authorization Reciprocity Agreement (SARA) and the Department of Education, students participating in a Mercy Health Sciences University distance education program will have their location determined at the time of initial enrollment through their address provided and verified on their application. A student who permanently relocates with the intent of living in a new state for greater than one year, should notify the University through the change of address form that can be found on the University website: https://mchs.edu/Students/Change-of-Address.

Course Load Policy

Any (non-ABSN) student wanting to register for more than 18 credit hours in any semester will need to obtain prior written approval from the Dean of Liberal Arts and Sciences. MercyPLUS students may not take more than 12 credits per quarter. Due to the accelerated nature of their program, ABSN students are granted an exception to this policy.

Course Numbers

Courses with a number below 100 do not count toward academic major requirements but may be counted toward enrollment status – full or part-time – for financial aid purposes.

Add/Drop Courses

Schedule Change

Students may change their course schedule through MyMercy until the term begins. Once the term starts schedule changes are not official until a completed Schedule Change Form is received by the Registrar's Office. Guidelines for schedule changes are as follows:

- Students may only enroll in a course during the first full week of the term (or equivalent period for shorter courses) without instructor permission. ABSN students must be in class on the first day of each term.
- Students may withdraw from a course with a refund before the end of the add/drop date without having the course appear on their academic record.
- All changes in course schedules should be approved by the student's advisor.

8. Students who withdraw from a course after the last day to add/drop a course with a refund date and before the end of the ninth week of the semester will receive a grade of "W." Withdrawals after this time period will result in a grade of "F." Students may withdraw from a course that is shorter than 15 weeks with a "W" after 7% of the course is completed and before 60% of the course is completed. Refer to registration information provided by the Registrar.

- Students receiving financial assistance should consult with the Financial Aid Office regarding financial consequences before changing schedules.

Auditing a Course

A student may audit a course if there is sufficient space available. Students may not audit any portion of a course that includes a clinical component. Although auditing students need not complete class assignments, take tests, or participate in class activities, they may do so with the permission of the instructor.

A student may not change from or to audit status after the first week of the course. Neither a grade nor credit will be granted for an audited course. Audited courses do not serve as prerequisites for other courses. The student's transcript will reflect "AU" for the audited class.

Directed Study

Designed to fulfill the need to have an existing course that is required by a student's major of study but currently is not being scheduled. The material covered in such courses is the same that is covered in the traditional course but is more self-directed with moderate oversight and direction by faculty. Credit assigned for a Directed Study course will be set equal to the credit value of the regular course. Students may complete a maximum of two courses of directed study work while at the University. A student must have completed fifteen credit hours at the University and have a cumulative GPA of 2.5 or higher before taking a Directed Studies course. Course offering requires consent of the Program Chair and the Dean of Liberal Arts and Sciences.

Course Cancellation

Mercy Health Sciences University reserves the right to cancel a course. Students will receive a full refund for the course.

Attendance

Students are expected to attend, be punctual, and actively participate in all classes, laboratory, clinical sessions, preceptorships, and internships for which they are registered. Instructors may provide additional attendance requirements on the course syllabus. Students must verify their course enrollment by attending class(es) the first week of each term. Students enrolled in online courses must have meaningful academic interaction in their online course(s) the first week of the term to verify their enrollment. Failure to verify enrollment may result in students being dropped from class(es) for non-attendance.

Administrative Withdrawal

The Vice President of Academic Affairs/Provost and the Dean of Liberal Arts and Sciences may administratively withdraw a student in situations when the student has never attended class, has established attendance but has current prolonged absences, or has exceptional circumstances preventing the student from attending class or coming to the University to complete a withdrawal form. Exceptional circumstances may include, but not be limited to:

- Extreme medical situation in which the student is unable to initiate the withdrawal process. In such cases the Dean of Students initiates the withdrawal process.
9. Behavioral situations, including where it is deemed the student may be a danger to themselves or others, may result in the student being withdrawn, suspended, dismissed, or expelled from the University. In such cases the Dean of Students, with the approval of the Vice President of Academic Affairs, initiates the withdrawal process.

Medical Withdrawals

For-Credit Classes – The Full-Adjustment and Prorated-Adjustment policies set forth above will be followed for students taking classes for credit. The student must follow the medical withdrawal policy set forth in the Academic Policies and Procedures section of the Student Handbook. If a medical withdrawal is granted, a grade of "W" will be awarded for each course from which the student withdraws.

Non-credit Classes – No refunds or tuition adjustments will be made. However, if a medical withdrawal is necessary, the student must follow the medical withdrawal policy set forth in the Academic Policies and Procedures section of the Student Handbook. If the student follows the medical withdrawal policy and a medical withdrawal is granted, the student will be allowed to re-enroll in the same class from which the student withdrew at 50% of the then-current cost if the student re-enrolls in the class or classes from which the student withdrew within 12 months of the date the medical withdrawal is approved. After 12 months the benefit is lost. This benefit is only available one time per student. If a medical withdrawal is granted, a grade of "W" will be awarded for each course from which the student withdraws.

Active Duty Military Withdrawals

For-Credit Classes – The Full-Adjustment and Prorated-Adjustment policies set forth above will be followed for students taking classes for-credit who are called to active duty. Military withdrawals are not available for purposes of completing the required two-week annual training. The student must follow the military withdrawal policy set forth in the Academic Policies and Procedures section of the Catalog. If a military withdrawal is granted, a grade of "W" will be awarded for each course from which the student withdraws.

Non-Credit Classes - No refunds or tuition adjustments will be made. However, if a military withdrawal is necessary, the student must follow the military withdrawal policy set forth in the Academic Policies and Procedures section of the Catalog. If the student follows the military withdrawal policy and a military withdrawal is granted the student will be allowed to re-enroll in classes from which the student withdrew within six months of returning from active duty. After six months the benefit is lost. This benefit is only available one time per student. If a military withdrawal is granted, a grade of "W" will be awarded for each course from which the student withdraws.

Grading

Mercy Health Sciences University uses the following grading system to monitor student's academic progress and computed grade point averages:

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Quality Points Per Credit Hour	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7	0.0

SPECIAL GRADES	**QUALITY POINTS**	**DESCRIPTION**
AU	* 0.0	Audit (no credit)
E	*0.0	Credit by Examination/Validation - Course credit given for successful examination completion or documented equivalency.
I	*0.0	Incomplete - Given as a course grade to students whose work is satisfactory but, for reasons acceptable to the instructor, are unable to complete the course. At the discretion of the instructor, deadlines for satisfying an Incomplete can be from a few days to 30 calendar days after the end of the semester in which the incomplete occurred unless prior approval from the Dean of Liberal Arts and Sciences is received. If no change is reported, the "I" becomes an "F" and is calculated in the student's GPA. It is the student's responsibility to make sure the deadlines for satisfying "I" are met.
P	*0.0	Pass - Met course requirements successfully as determined by the instructor. It is not calculated in GPA.
W	*0.0	Withdrawal from a course before the end of the week following the University mid-term.
REPEATED COURSE	*0.0	Repeated Course is indicated on the transcript with the notation that it is the same as the department and number of the repeat.

*not calculated in GPA

Determination of Course Grade

Faculty members determine the grading standards for each course they teach and identify these standards in the course syllabus. The course syllabus is not to be considered a contract with the student. The instructor can revise, modify, add to or eliminate terms and requirements contained in the course syllabus at any time with proper notice to the students.

Grade Disputes

Students who dispute a course grade are required to follow the Grade Appeal Policy found in the Academic Policies and Procedures section of the Catalog.

Failed Course Policy

Students failing **("C-" or lower)** one course in the major may be delayed promotion based on major/curriculum structure. See the Program Dismissal Policy for guidelines pertaining to program dismissal.

Incomplete Grade Policy

A student may need an extension of time to complete course requirements due to unanticipated circumstances arising near the end of the term. Extenuating circumstances occur that prevent students from completing coursework during a given semester and make it impossible to meet course requirements on time. *Incompletes are not issued in cases in which students simply do not complete their work within the specified term and there were no extenuating circumstances.* A student may request an Incomplete ("I") Grade, or a course instructor may initiate an *Incomplete Grade*. The student must have completed at least half of the coursework to be eligible. Assigning an *Incomplete Grade* is at the discretion of the course instructor. Additional time granted to complete coursework will normally not exceed the amount of time lost due to the extenuating circumstances *(generally within a few days; up to 30 calendar days after semester ends)*. Final approval or denial of the request is made by the Program Chair, or by the Dean of Liberal Arts and Sciences as needed. The Chair will determine if the student is able to be promoted to the next semester with an outstanding "I" *Incomplete Grade*. Students may be required to pay a clinical make-up fee.

Contract for Incomplete Grade

A contract for an incomplete grade is initiated in collaboration with the course instructor. The contract must be made prior to the end of the term in which the course was offered. The student must provide any requested documentation to be reviewed and completed by the course instructor prior to the end of the term. The instructor must indicate, on the contract, the work to be completed, due date, and grade to be assigned if the work is not completed by the due date. If the course is not completed by the date indicated, the grade assigned on the incomplete application will be the final course grade.

Extenuating Circumstance Criteria

Extenuating circumstances for the purpose of granting additional time to complete coursework include death in the family, serious accident or illness resulting in an inability to attend class or do the required work, unusual circumstances surrounding the birth of a child, severe acts of nature, and similarly mitigating circumstances which could not have been prevented or anticipated by the student and were completely beyond the student's control.

Grade Point Average

Semester GPA

A student's semester Grade Point Average (GPA) is determined by dividing the number of quality points earned during the semester by the number of graded credit hours attempted during the semester. Only course grades earned at Mercy Health Sciences University are used to calculate a student's semester GPA.

Cumulative GPA

A student's cumulative GPA is determined by dividing the total number of quality points earned by the total number of graded credit hours attempted. Only course grades earned at Mercy Health Sciences University are used to calculate a student's cumulative GPA. GPA is calculated to the thousandths decimal place.

Passing/Failing Courses

Courses required for majors, minors, or applied to the core curriculum are considered failed courses unless a grade of **"C" or higher**, (not C-), is earned. Courses not required for majors, minors, or applied to the core curriculum are considered failed courses if a grade of "F" is earned.

Repeated Courses

A student may repeat a course in order to obtain a better grade. A student is not required to repeat a failed course or a course in which the student earns a "C-" or below unless it is a required course for the major, minor or core curriculum. However, lower grades significantly impact a semester and cumulative GPA. Students choosing to repeat a course should contact the Financial Aid Office to determine if financial aid is available to pay for the course.

Repeated courses are designated on the student's transcripts. The last grade earned is the grade calculated in the student's GPA. Both the original course and the repeated course(s) appear on the student's official transcript. Students cannot remove unsatisfactory grades earned at Mercy Health Sciences University by repeating the course at another institution nor will the GPA calculations be changed as a result of transferring a course to Mercy Health Sciences University.

Academic Renewal Policy

Mercy Health Sciences University students who have experienced a lapse in enrollment for a period of 2 years or more may petition in writing to be considered for Academic Renewal. Academic Renewal is an opportunity for students to have specific Mercy Health Sciences University grades not calculated in their grade point averages (GPA). Students must complete at least 12 credits within 2 consecutive semesters at Mercy Health Sciences University with a minimum GPA of 2.0 prior to receiving grade forgiveness. No withdrawal, "W", grades may be received during these two semesters. Students who have earned a certificate or degree (excluding short term certificates) from Mercy Health Sciences University are not eligible for academic renewal.

- Students transferring to another College or University should contact that institution to determine the impact of academic renewal on transfer credits.
- Courses completed before and after the academic renewal remain on the transcript and may be considered when students apply for other undergraduate or graduate degrees. A notation on the transcript will signify that academic renewal has been applied.

- The adjusted GPA calculations are not used in determining eligibility for student financial aid. It is the responsibility of the student to consult financial aid to determine eligibility.
- Notation of unsatisfactory progress will not be removed from students' academic records.
- Students may be granted Academic Renewal only once.
- If the student is granted Academic Renewal, the forgiven grades will not be included in the student's cumulative Mercy Health Sciences University GPA but will remain on the transcript.
- The decision on whether or not to grant Academic Renewal is final.

Academic Renewal Petition Procedure

Students requesting academic renewal must complete a Petition for Academic Renewal that is available from the Registrar's Office.

- Students may not submit the Petition for Academic Renewal until they have been readmitted to Mercy Health Sciences University. The petition must be submitted to the Registrar's Office prior to completion of the first term after readmission to the University.
- Only grades of C- or lower, from a maximum of two terms in which the student enrolled at Mercy Health Sciences University, may be forgiven.
- Upon completion of 12 credits the petitioner will be notified by the Registrar's Office within 60 days if Academic Renewal was granted or not.

Academic Performance

The academic records of all students are reviewed at the end of each semester to determine if students are making satisfactory academic progress. Academic progress and performance will be evaluated based on the number of credit hours attempted at Mercy Health Sciences University. To be considered in "good standing" with the University, students are expected to maintain a cumulative grade point average (GPA) and semester GPA of at least a 2.0. Students are encouraged to maintain ongoing contact with the Student Affairs Office if they have questions about their academic major, academic record, or eligibility for financial aid. Financial aid standards of progress can differ from those for Academic Performance. See the Financial Aid Satisfactory Academic Progress Standards found in the Financial Aid section of the Catalog.

Academic Warning

Students will receive a written academic warning at the end of any semester in which their term GPA falls below a 2.0 and their cumulative GPA remains at or above 2.0. While students may be in good standing with the University, they may not be making satisfactory progress in their academic program. This may lead to delayed academic progression or program dismissal.

Probation Status 1

Students are placed on Probation Status 1 when their cumulative GPA falls below 2.0. Students should develop an Academic Support Action Plan with the Norkaitis Student Success Center by the end of the third week of this probationary term. Failure to develop the plan or failure to comply with the terms agreed upon in the plan may result in the loss of financial assistance.

- Students who improve their cumulative GPA to a 2.0 or above at the end of the probationary term will be removed from probationary status.
- Students enrolled in 7 credits or more who improve their cumulative GPA by earning a term GPA of 1.8 or above but fail to raise their cumulative GPA to the minimum standard will be placed on Probation Status 2.
- Students enrolled in 6 credits or fewer will have two terms to earn a term GPA of 1.8 or above. Students who fail to raise their cumulative GPA to the minimum standard within two terms will be placed on Probation Status 2. Students remain on Probation Status 1 for their second term if they fail to raise their cumulative GPA to 1.8 or higher after the first term.
- Students who earn a term GPA below 1.8 at the end of this probationary term will be dismissed from the University.

Probation Status 2

Students who are not dismissed from the University after Probation Status 1 but fail to improve their performance to be removed from probation are placed on Probation Status 2. These students should develop an Academic Support Action Plan with the Norkaitis Student Success Center by the end of the third week of this probationary term. Failure to develop the plan or failure to comply with the terms agreed upon in the plan may result in the loss of financial assistance.

- Students who improve their cumulative GPA to a 2.0 or above at the end of the probationary term will be removed from probationary status.
- Students enrolled in 7 credits or more who improve their cumulative GPA by earning a term GPA of 1.9 or above but fail to raise their cumulative GPA to the minimum standard will be placed on Probation Status 3.

Students enrolled in 6 credits or fewer will have two terms to earn a term GPA of 1.9 or above. Students who fail to raise their cumulative GPA to the minimum standard within two terms will be placed on Probation Status 3. Students remain on Probation Status 2 for their second term if they fail to raise their cumulative GPA to 1.9 or higher after the first term.

- Students who earn a term GPA below 1.9 at the end of this probationary term will be dismissed from the University.

Probation Status 3

Students who are not dismissed from the University after Probation Status 2 but fail to improve their performance to be removed from probation are placed on Probation Status 3. Students can remain on Probation Status 3 for one term. Students should develop an Academic Support Action Plan with the Norkaitis Student Success Center by the end of the third week of this probationary term. Failure to develop the plan or failure to comply with the terms agreed upon in the plan may result in dismissal from the University.

- Students who improve their cumulative GPA to a 2.0 or above at the end of the probationary term will be removed from probationary status.
- Students who earn a cumulative GPA below 2.0 at the end of this probationary term will be dismissed from the University.

Program Dismissal from a Clinical Focused Major

1. Students who fail a course in the major that is a prerequisite to another course must retake the course before they can progress in the major. Clinical placement is not guaranteed.
2. Students who fail a course in the major and pass upon retaking the course at Mercy Health Sciences University are eligible for progression in the major. Clinical placement is not guaranteed.
3. Students who fail more than one course in the major must have a written success plan developed with the Student Success Center.
4. Students who fail three or more courses in the major (regardless of retakes) will be dismissed from the major and must sit out for at least one semester before reapplying to any clinical major. Readmission is not guaranteed.
5. Students who seek readmission following major or University dismissal must have a written success plan developed with the Student Success Center as part of the reapplication material. Readmission is not guaranteed.
6. Failures are cumulative across majors.
7. Students who appeal any of the above policies must cite extenuating circumstances and present a written success plan developed with the Student Success Center as part of their appeal.

Graduation Requirements

Students earning an associate degree or a bachelor's degree must complete all of the following:

- Minimum cumulative GPA of 2.0 (4.0 scale);
- Complete the Core Curriculum requirements;
- Complete requirements for the major;
- Communication Competencies (Oral and Written);
- Critical Thinking Competency;
- For all bachelor's degree programs, a minimum of 30 credits must be upper division courses (300 and 400 level).

Note: Students will not receive their diploma until all graduation requirements and financial obligations are successfully completed.

Graduation Residency Requirements

Students must complete at least 30 credits at Mercy Health Sciences University to meet the residency requirement for bachelor's degree along with all Major and Minor Requirements. Students must complete at least 15 credits at Mercy Health Sciences University to meet the residency requirement for an associate degree along with all Major and Minor Requirements. A conferred degree and official transcripts are issued after fulfillment of all graduation requirements, including clearance through all University departments (e.g. Library, Business Office, Financial Aid).

Honors

Graduation Honors

Mercy Health Sciences University recognizes the outstanding achievement of its graduates by awarding the following graduation honors:

Recipients of the Bachelor's Degree

Summa cum laude: a cumulative GPA of 3.800 or higher.
Magna cum laude: a cumulative GPA of 3.650 to 3.799 inclusive.
Cum laude: a cumulative GPA of 3.500 to 3.649 inclusive.

Recipients of the Associate Degree

Highest Honors. a cumulative GPA of 3.800 or higher.
High Honors. a cumulative GPA of 3.650 to 3.799 inclusive.
Honors. a cumulative GPA of 3.500 to 3.649 inclusive.

Recipients of Certificates

Certificate Highest Honors. a cumulative GPA of 3.800 or higher.
Certificate High Honors. a cumulative GPA of 3.650 to 3.799 inclusive.
Certificate Honors. a cumulative GPA of 3.50 to 3.649 inclusive.

Students must complete 30 credit hours at Mercy Health Sciences University to be a recipient of an associate degree honors or certificate honors and must complete 60 hours at Mercy Health Sciences University to be a recipient of bachelor's degree honors.
Commencement ceremony honors are based on the student's cumulative grade point average achieved at the end of the semester before graduation. Official honors are determined by the final cumulative grade point average.

Semester Honors

Mercy Health Sciences University has established a President's List and a Dean's List to recognize exceptional academic achievement. The lists are prepared at the end of each semester including the summer semester. All students who have been admitted to the University and are enrolled in six or more credit hours are eligible.

President's List

Students who earn a semester GPA of at least 3.750 and do not have incomplete grades are placed on the President's List.

Dean's List

Students who earn a semester GPA between 3.500 and 3.749 and do not have incomplete grades are placed on the Dean's List.

Services for Students with Disabilities

Mercy Health Sciences University is committed to equality of educational opportunity for all students. The Norkaitis Student Success Center facilitates academic accommodations and services for students with disabilities so that those students have equal access to University programs and activities. It is the responsibility of the qualified individual with a disability to disclose information regarding the nature and extent of the disability to the Dean of Student Affairs.
Student Disability Services administered by the Norkaitis Student Success Center include:

- Establish and communicate criteria for disability services at Mercy Health Sciences University.
- Review documentation to verify eligibility for disability services.
- Facilitate academic accommodations for qualified students with disabilities.
- Support disability-related services and opportunities for students with disabilities.

Academic Accommodations

Academic accommodations are provided on a case-by-case basis. The Dean of Student Affairs reviews the recommendations in the professional report submitted on the student's behalf and then meets with the student to discuss how the functional impact of the disability may relate to course requirements. Together, they develop an accommodation plan which the student shares with the instructor.

Students are required to meet with the Dean of Student Affairs to initiate the interactive process to provide reasonable academic accommodations.

Clinical/Practicum Work Policy

Students in clinical or practicum experiences may not use paid employment to satisfy educational outcomes.

1. Employment hours and clinical/practicum hours must be clearly separated. Students may not receive compensation during clinical/practicum hours.
2. Students must wear student uniforms and student identification name badge while in the clinical/practicum setting. Students may not wear student uniforms and student identification name badge while working as an employee.

Grade Appeal Policy

The purpose of the Grade Appeal Policy is to establish a consistent procedure by which students may seek review of final grades assigned in courses at Mercy Health Sciences University. Only final course grades may be appealed. The policy recognizes the right and responsibility of faculty members to exercise their professional judgment in evaluating academic performance and the right of students to have their academic performance judged in a fair and impartial manner.

Grounds for Grade Appeal

A student may appeal a final course grade only on the grounds that:
1. The grade was assigned based on a miscalculation or clerical error;
2. The grading standards for the course were not clearly articulated by the instructor in the syllabus, or the grade was assigned in a manner inconsistent with articulated standards.

A student who wishes to appeal a final grade should follow the procedures outlined in the Academic Grievance Policy (below).

Academic Grievance Policy

Purpose

Students of Mercy Health Sciences University may initiate the academic grievance procedure if they believe a policy has not been followed with respect to academic matters. Academic matters are instructional activities, grading procedures, or other incidents related to academic affairs. This policy does not address issues regarding student employment or sexual harassment. It deals with academic grievances only. Students should be aware that clear evidence is needed to contest a grade. Belief that a subject or text was too difficult is not grounds for a complaint.

A student must have evidence that a specific policy was violated or that the student was treated in a prejudicial or capricious manner. This policy does not limit the University's right to change rules, policies, or practices.

Process

Step 1. Students must first contact the faculty member who allegedly violated their rights to determine if there can be a resolution. The contact should be made by the student within 2 business days of the event, excluding observed holidays.* The student must provide a written document to the faculty member which includes:

a. A statement concerning the nature of the complaint,
b. Any evidence on which the complaint is based, and
c. The outcome that the student seeks.

The student and faculty member will then meet within 2 business days to determine if a resolution can be reached. If a resolution cannot be reached, the student should submit their concern using the following form, so that a record is made of the nature and time frame of the incident. The student has the right to appeal the decision to the next step.

* The mention of "2 business days" (here and below) is *not* intended as a statute of limitations but as a general guideline for ensuring that grievances are addressed in a timely manner. Apart from extenuating circumstances, grievances must be addressed during the same semester in which the incident occurred.

Step 2. Following the outcome of Step 1, the student may file a written appeal to the *Program Chair within 2 business days. The Program Chair will meet with the student and the faculty member within 2 business days to determine if a resolution can be reached. The student has the right to appeal the decision to the next step.

**If the* faculty *member is a Nursing Program Chair, the student may file a written appeal to the Dean of Nursing.*
**If the faculty member is a Program Chair in any program other than Nursing, the student may file a written appeal to the Senior Director of Institutional Research, Assessment, and Accreditation (SDIRAA).*

Step 3. Following the outcome of Step 2, the student may file a written appeal to the Dean of Liberal Arts and Sciences within 2 business days. The Dean of Liberal Arts and Sciences will lead an Academic Response Team which will be comprised of five qualified employees, made up of both faculty and staff. The Dean of Liberal Arts and Sciences will seek diverse representation from across programs, and the Team will normally include one of the Nursing Deans as well as a staff member from within the Office of Academic Affairs. The Academic Response Team will meet with the student and faculty member within 2-3 business days. The team will investigate as appropriate and may seek assistance or information from other personnel. All discussions and submitted written documents will be treated as strictly confidential. After this review, the Academic Response Team will issue a decision to the student, the faculty member, and the Program Chair. The student has the right to appeal the decision to the next step.

Step 4. Following the outcome of Step 3, the student may file a written appeal to the Provost/Vice President for Academic Affairs within 2 business days of the decision from the Academic Response Team. The Provost will provide a written response within 2 business days. The Provost's decision is final.

SARA Student Complaint Policy+

Mercy Health Sciences University is a participant in the State Authorization Reciprocity Agreements (SARA), which facilitates the delivery of distance education across state lines. In accordance with NC-SARA Policy 4.4, effective January 1, 2026, students should be aware of the following guidelines regarding student complaints as they pertain to distance education:

Institutional Complaint Process
Students are encouraged to first resolve complaints through Mercy Health Sciences University's internal grievance procedures. These procedures are outlined in the Student Handbook and available through the Office of Student Affairs.

SARA Complaint Process
Students residing in other SARA member states who are enrolled in Mercy Health Sciences University's distance education programs and who have exhausted institutional complaint procedures may submit a complaint through the SARA Student Complaint Form.

Important Notes:

- SARA applies only to interstate distance education.
- Complaints about grades or student conduct are not eligible under SARA.
- Complaints must be submitted within two years of the incident.
- Anonymous complaints will not be reviewed.

Contact for SARA Complaints in Iowa:

Iowa University Aid
475 SW 5th St, Suite D
Des Moines, IA 50309

Student Complaints Webpage – https://educate.iowa.gov/higher-ed/student-complaints
The SARA Student Complaint Form is available online.
+ Revised 12/10/2026.

Credit Hour Explanation

Mercy Health Sciences University supports the Carnegie Foundation philosophy and definition of the credit hour and applies it as follows.

One credit hour is associated with a 50-minute clock hour or the equivalent and is to be calculated as follows: 1credit hour/60 min. x 50 minutes/hour x 1 hour/week x 15 weeks/term = 12.5 hours/term = 1 credit hour of didactic class time.

A three-credit didactic course would be calculated as follows: 1 hour/60 min. x 50 minutes/hour x 3 hours/week x 15 weeks/term = 37.5 clock hours/term.

This definition is consistent with the U.S. Department of Education's accepted definition and indicates a 1:1 ratio of one contact hour (50 - 60 minutes) to one credit hour of didactic education or the equivalent. Laboratory courses are calculated as an average of 25 hours per term constituting two contact hours to one credit hour equaling a 2:1 ratio or the equivalent.

Clinicals, practicums, internships, and similar type courses that follow the clock hour definition are calculated on a 3:1 ratio or the equivalent.

MERCY HEALTH SCIENCES UNIVERSITY CREDIT HOUR DEFINITIONS		
Instructional Activity	**Calculation**	**Definition of Credit**
Didactic Instruction	1: 1	1 credit equals the equivalent to 1 hour of scheduled class time. Organized instruction in a university classroom setting and the presentation of course material is led by the instructor. Examples include lectures, cases, small group work, facilitated discussions, and team-based learning.
Lab Instruction	1: 2 - 3	1 credit equals the equivalent of 2 - 3 hours of scheduled laboratory time.
Clinical and Practicum: Direct supervision	1: 3	1 credit equals the equivalent of 3 hours of training or experiential participation.
Clinical and Practicum: Indirect supervision; Preceptor	1: 1	1 credit equals the equivalent of 1 hour of training or experiential learning assuming a student will be in another setting with a preceptor or guided experience.
Immersive Simulation	1: 1	1 credit equals the equivalent of 1 hour of scheduled simulation class time. Organized participation in an intensive simulation-based setting designed to replicate clinical scenarios followed by structured debriefing to promote intentional practice and mastery. Examples include manikin, standardized patient, and virtual simulation.
Capstone Project	TBA	Serve as the major professor for a stand-alone, credit-bearing culminating activity that is comprehensive and reflective for completion of a graduate degree program - comparable to a thesis.
Blended/Hybrid Course	1: 1 or 2	1 credit equals the equivalent of 1 hour of direct faculty instruction or 2 hours of self-study. A significant portion of instruction is delivered online while a portion of the course occurs in didactic or clinical formats. The online portion is approximately 25 - 75% of the total course.
Online Course	1: 1	1 credit equals the equivalent of 1 hour of documented instructional time. All instruction occurs synchronously or asynchronously online through substantive and regular engagement between the student and the instructor.

Student Academic Requirements

Critical Thinking

There are many methods and models of investigation, problem solving, discovery, and thinking critically. Undoubtedly, students coming to Mercy Health Sciences University have become accustomed to using the scientific method. While at the University students will continue to explore and participate in these methods of investigation and develop a practice of thinking critically as it is built-in across the curriculum. All degree-seeking students at Mercy Health Sciences University will complete the Critical Thinking Competency (CTC) requirements within their major as part of their graduation requirements.

Communication: Oral and Written

The Communication Competency Requirement (CCR) identifies quality standard expectations for writing and oral communication for all degree-seeking students at Mercy Health Sciences University. Students will complete oral and written CCR requirements within their major as part of their graduation requirements. The competency's assessment consists of one oral communication and one written communication. The CCR will be completed in a designated course(s) in each major.
*In the event that a student does not demonstrate competency on the writing assignment declared a CCR, the student will work with faculty and/or tutors for opportunities to complete the requirement.
* In the event that a student does not demonstrate competency on the oral communication assignment designated a CCR in that major, the student will work with faculty for other opportunities to complete the requirement.

Service Learning

Service-learning builds upon the legacy of the Sisters of Mercy, promotes a culture that values service, and acknowledges the higher purpose of higher education institutions. Graduation from Mercy Health Sciences University includes a Service-Learning component within its curriculum.
Definition of Service Learning – Service Learning is an experiential learning opportunity that mutually benefits the provider and recipient of service, enhances academic outcomes, meets a community-defined need and encourages a University-wide culture of service. These goals are accomplished through specified project outcomes, a structured service activity, and guided reflection.

Goals for Service Learning

- To create a rich context for learning that will enable joining theory with experience and thought with action.
- To apply discipline-specific and/or interdisciplinary knowledge as well as critical thinking skills to community-defined needs.
- To foster knowledge, sensitivity, and the challenging of assumptions in regard to various topics such as cultural competence, leadership skills, social justice issues, and community needs – especially as these topics apply to health science.
- To build community connections and foster ongoing communications with community members, agencies, groups, and organizations.

All associate or bachelor's degree-seeking students are expected to participate in at least 15 hours of Service Learning in order to receive their degree. The 15 hours will be completed by students in one or more of the following ways:

Faculty-Facilitated Project: An experience provided in a course and/or University-sponsored service-learning experience (approved by the faculty member overseeing the project).

- Student Initiated Project: A student-planned and client-based service experience (approved by the student's advisor) working with a community or faith-based organization.

Students are responsible for turning in all of the required paperwork (regardless of the type of project) to the Student Affairs office for documentation in meeting the graduation requirement.

General Education Core Curriculum Requirements

The General Education Core Curriculum reflects the educational and ethical beliefs of the core values intrinsic to Mercy Health Sciences University. The Mercy Health Sciences University Core values of knowledge, reverence, integrity, compassion, and excellence underlie our work, how we interact with each other, and which strategies we employ to fulfill our mission, rooted in the heritage of the Sisters of Mercy.
Liberal education challenges students to think critically and independently, increase social and global consciousness, embrace change and make informed decisions. General education, as a function of liberal studies, provides a broad foundational basis of knowledge which serves to develop within students' intellectual and cognitive capabilities, cultural and moral awareness and integrative abilities to connect bodies of knowledge.
General education, alone or when teamed with the specific curricula in a major, provides the foundation for Mercy Health Sciences University students to become productive global citizens and future industry leaders.
Topics for the Core Curriculum, by subject, up to and including the baccalaureate degree are as follows:

Natural Science – Courses in this category will encompass the study of the exploration and explanation of natural scientific principles.

100-200 Level Courses:

1. Applies natural scientific knowledge in various contexts.

300-400 Level Courses:

1. Evaluates natural scientific knowledge in various contexts.

Math – Courses in this category will encompass the theory and application of math principles.

100-200 Level Courses:

1. Interprets information that has been presented in mathematical form (e.g., with functions, equations, graphs, diagrams, tables, words, and geometric figures).
2. Applies basic mathematical logic to applied situations.

300-400 Level Courses:

1. Evaluates evidence to assess interpretations.
2. Draws conclusions through the use of appropriate quantitative methods to solve applied situations.

Social Science – Courses in this category will encompass the study of society and social relationships as they relate to human behavior.

100-200 Level Courses:

1. Identifies influences on human behavior.
2. Applies social sciences principles in various contexts.

300-400 Level Courses:

1. Analyzes human behavior within the social context.

2. Evaluates social science principles in various contexts.

Communication –
Composition: Courses in this category will encompass writing for inquiry, learning, thinking, and communicating in academic, professional and social settings.

Speech/Interpersonal Communication: Courses in this category will encompass the use of effective communication through dialogue, presentations and active listening.

100-200 Level Courses:

1. Composition: Independently expresses original thinking that conveys mastery of the subject.
2. Composition: Produces writing that is logically organized, free of errors in grammar, usage, and mechanics.
3. Speech: Constructs spoken expressions using verbal and nonverbal messages specifically tailored for the listening audience.

Humanities – Courses in this category will encompass the study of the exploration and explanation of the human experience. The humanities involve inquiry into values, ideas, ideals and consciousness (awareness) as they seek to describe how experiences shape our understanding of the world.

100-200 Level Courses:

1. Identifies contrasting theories and methodologies utilized within the humanities.
2. Describes the value of diverse forms of the expression of human experience.

300-400 Level Courses:

1. Evaluates contrasting theories and methodologies utilized within the various fields that make up the humanities.
2. Analyzes diverse forms of human expression.

Cultural Appreciation & Diversity – Courses in this category will encompass the respect and celebration of individual and cultural values with the recognition that each is unique.

100-200 Level Courses:

1. Utilizes a diverse perspective in various contexts.
2. Applies knowledge of diversity in various contexts.

300-400 Level Courses:

1. Analyzes various forms of human and cultural diversity.
2. Exhibits an ability to collaborate within and between diverse cultural contexts to accomplish a common goal.

Servant Leadership – This course will inspire students to embrace practices that enrich the lives of individuals, build better organizations, and ultimately create a more just and caring world.

100-200 Level Courses:

1. Identifies the role and responsibilities of being a servant leader in various contexts.
2. Applies principles of servant leadership in personal, professional, and civic contexts.

General Education Core Curriculum Requirements

Bachelor's Degree Requirements

Core Curriculum – Bachelors: 41 credit hours (100 level or higher)

- Natural Science ..... 7 credits
- Math or Statistics..... 6 credits
- Social Science. ..... 6 credits
- Communication ..... 7 credits
  a. Communication (6 credits)
  b. Speech (1 credit)
- Humanities..... 6 credits
  a. Philosophy or Religion (3 credits)
  b. Humanities (3 credits) 100 level or higher
- Cultural Appreciation and Diversity..... 3 credits
- Core Elective ..... 3 credits
- Servant Leadership ..... 3 credits

Associate's degree Requirements

Core Curriculum – Associates: 29 credit hours (100 level or higher)

- Natural Science..... 4 credits
- Math or Statistics..... 3 credits
- Social Science ..... 3 credits
- Communication ..... 7 credits
  a. Communication (6 credits)
  b. Speech (1 credit)
- Humanities..... 3 credits
- Core Elective ..... 6 credits
- Servant Leadership ..... 3 credits

Diploma Requirements

Core Curriculum – Diploma: 9 credit hours (100 level or higher)

- Natural Science or Math ..... 3 credits
- Communication ..... 3 credits
- Social Science or Humanities..... 3 credits

Certificate Requirements

Servant Leadership - All certificates have servant leadership content embedded in the curriculum.

Core Domains

Natural Science

BIO 101	General Biology I/with Lab	4 credits
BIO 102	General Biology II/with Lab	4 credits
BIO 130	Principles of Microbiology	4 credits
BIO 137	Foundations of Anatomy and Physiology I	3 credits
BIO 138	Foundations of Anatomy and Physiology II	3 credits
BIO 180	Human Anatomy/with Lab	4 credits
BIO 185	Human Physiology/with Lab	4 credits
BIO 203	Microbiology/with Lab	4 credits
BIO 225	Principles of Pathophysiology	3 credits
BIO 302	Pathophysiology	3 credits
BIO 320	Genetics/with Lab	4 credits
BIO 360	Immunology	3 credits
BIO 400	Pathogenic Microbiology/with Lab	3 credits
BIO 410	Advanced Anatomy/with Lab	4 credits
BIO 450	Histology and Embryology/with Lab	4 credits
BIO 460	Cell and Molecular Biology	3 credits
CHE 100	Chemistry for Health Professionals	3 credits
CHE 101	General Chemistry I/with Lab	4 credits
CHE 102	General Chemistry II/with Lab	4 credits
CHE 320	Organic Chemistry I/with Lab	4 credits
CHE 321	Organic Chemistry II/with Lab	4 credits
CHE 420	Biochemistry/with Lab	4 credits
NTR 205	Nutrition	3 credits
NTR 300	Applied Nutrition	3 credits
PHA 202	Pharmacology	3 credits
PHY 101	Physics I/with Lab	4 credits
PHY102	Physics II/with Lab	4 credits

Math

MAT 102	Math for General Studies	3 credits
MAT 112	Math for Health Professionals	3 credits
MAT 120	College Algebra	3 credits
MAT 225	Calculus for Health Sciences	4 credits
STA 165	Fundamentals of Statistics	3 credits
STA 330	Biostatistics	3 credits

Social Science

PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 240	Gerontology and Aging	3 credits
PSY 410	Social Psychology	3 credits
SOC 102	Sociology	3 credits
SOC 360	Death, Dying, and Bereavement	3 credits
SOC 415	Social Justice Approach to Social Issues	3 credits

Communication

ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 105	Small Group Communication	1 credit
SPE 110	Introduction to Public Speaking	3 credits

Humanities

ENG 165	African American Literature	3 credits
ENG 225	Young Adult Literature and Medicine	3 credits
ENG 335	Literature and Medicine	3 credits
FRE 101	French I	3 credits
GLS 220	Cultural Perspectives on Global Health	3 credits
HIS 236	History of the Modern World	3 credits
HUM 120	Introduction to Film	3 credits
MUS 120	Music Appreciation	3 credits
*PHI 110	Critical Thinking in a Diverse World	3 credits
*PHI 120	Introduction to Philosophy	3 credits
*PHI 280	Caring in a Diverse Healthcare Env.	3 credits
*PHI 301	Critical Thinking	3 credits
*PHI 302	Applied Critical Thinking	3 credits
*PHI 314	Ethics	3 credits
*PHI 320	Bioethics	3 credits
SPA 101	Spanish I	3 credits
SPA 102	Spanish II	3 credits
*REL 301	Comparative Christian Traditions	3 credits
*REL 320	New Testament Analysis	3 credits
*REL 334	Comparative World Religions	3 credits

**Denotes classes that can be applied as a Humanities or Religion/Philosophy credit.*

Cultural Appreciation and Diversity

ENG 165	African American Literature	3 credits
ENG 225	Young Adult Literature and Medicine	3 credits
FRE 101	French I	3 credits
GLS 220	Cultural Perspectives on Global Health	3 credits
HIS 236	History of the Modern World	3 credits
PHI 110	Critical Thinking in a Diverse World	3 credits
PHI 280	Caring in a Diverse Healthcare Env.	3 credits
PSY 240	Gerontology and Aging	3 credits
PSY 303	Abnormal Psychology	3 credits
PSY 410	Social Psychology	3 credits
SOC 102	Sociology	3 credits
SOC 415	Social Justice Approach to Social Issues	3 credits
SPA 101	Spanish I	3 credits
SPA 102	Spanish II	3 credits
REL 301	Comparative Christian Traditions	3 credits
REL334	Comparative World Religions	3 credits

Servant Leadership

SVL 285	Servant Leadership	3 credits

Academic Minor for Baccalaureate Degrees

The Academic Minor consists of 15 to 20 credit hours in a secondary area or field of study for baccalaureate degree candidates. Students may choose to add a minor to their studies to supplement their major, develop specialization in a particular area of interest, acquire additional knowledge for career opportunities, or to pursue a personal passion or interest.
Students who already have the baccalaureate degree may complete the requirements for a minor but are not awarded a second baccalaureate degree. A minor is not required in order to earn a baccalaureate degree at Mercy Health Sciences University. Students do not need to be admitted to a minor in order to pursue the minor. Students who select a minor must earn at least 9 credit hours in their minor field of study at Mercy Health Sciences University.

Available Minors are:

- Chemistry
- Healthcare Administration
- Human Services
- Public Health
- Biomedical Research

After Admission to a Clinical Focused Major

To ensure the safety of all clients served by Mercy Health Sciences University students and to meet regulations of our clinical partners regarding student participation in clinical site rotations as determined by standards of The Joint Commission (TJC) and in compliance with state and federal laws, a national criminal background check and child and dependent adult abuse checks will be conducted on each student seeking admission to an academic major that includes a clinical, preceptorship, internship, or similar experience that require patient interaction. Further, students are also required to provide documentation of current immunizations and personal health information as required by the clinical standards of the profession they have been admitted to study.

1. Initiate a criminal background and a child and dependent adult abuse check with the University specified vendor along with the required payment to the vendor. The student must authorize the vendor to provide the results of these checks as part of the final verification for admission to the academic major.
2. Complete documentation needed on immunizations and upload into the vendor's software. It is advised to submit the Immunization Form (form provided by Services)Student Success Center) to your primary healthcare provider as soon as possible in order to ensure its completion in advance of the admission deadline to the major established by the Chair. The Immunization Form verifies compliance with the following:
    - Two-step TB skin testing within the past year; then one-step TB skin test yearly after admission. Acceptable alternatives to TB skin testing are a negative T-spot blood test OR a negative QuantifFEROON Gold blood test. If a positive skin test or a history of positive tests, a negative chest-ray report administered within the past 12 months is required; then a TB Questionnaire completed yearly after admission (form provided by Student Success Center).
    - Hepatitis B: Completion of series (three doses), OR initiation of the Hepatitis B series (if series is in process, student must meet all immunization deadlines per CDC guidelines to remain in clinicals or practicums), OR a positive titer showing full immunity.

- Measles, Mumps, and Rubella (MMR): Completion of series (two doses) OR positive titers of all three diseases showing full immunity.
- Chicken Pox (Varicella): Completion of series (two doses), OR positive titer showing full immunity, OR proof of disease by medical provider documentation.
- Seasonal flu vaccination is required annually to participate in courses that include a clinical rotation during flu season.
- Tetanus, Diphtheria & Pertussis (TDaP): Submit documentation of a Tetanus, Diphtheria & Pertussis (TDaP) vaccination, administered within the past 10 years. The renewal date will be set for 10 years from the date administered.

3. Acknowledge personal ability to adhere to the clinical standards for the academic major.
4. Upload into the vendor's software proof of completion and current certification in American Heart Association Basic Life Support Provider **or** in American Red Cross CPR for Healthcare Providers (MLS major is not required to meet this requirement).
5. All students who will pursue an academic degree with a clinical requirement must complete a 10-panel drug screen to ensure patient safety and compliance with clinical site requirements. The screen must be arranged via the College's approved clinical compliance database and paid for in advance. Please consult the Student Handbook for additional details on arranging a drug screen.
6. Beginning May 1, 2026, all students will now be required to complete a physical exam annually.

Failure to complete any of the procedures for the program may delay or end the enrollment process.

*Iowa Code 2.8(5) states a clinical component may not be taken by a person:

a. Who has been denied licensure by the Board.
b. Whose license is currently suspended, surrendered or revoked in any U.S. jurisdiction.
c. Whose license/registration is currently suspended, surrendered or revoked in another country due to disciplinary action.

Disclosure of events that occur after the background check has been completed
All students are required to immediately report to their Program Coordinator any criminal activity including arrests, criminal charge or conviction after the background check was completed, and during the remaining course of the program. Required disclosures also include any allegations, investigations and/or disciplinary action from any licensing board or agency. To preserve the safety of patients and to comply with the requirements of clinical affiliation agreements, students have the duty to immediately inform the respective HR office of each clinical site in which they have a clinical experience of any post background check criminal activity, allegations, investigations, and disciplinary actions. Failure to inform the Program Coordinator and any applicable clinical site of any such event will be considered inappropriate professional and unethical conduct in violation of the student code of conduct and subject to the University disciplinary process.

Maintaining Immunization and Certification Requirements
All students must maintain current documentation within the electronic data management system. If a student fails to provide updated documentation of requirements, the student will not be allowed to begin/continue clinical course work and/or register for additional courses.

Preceptorship Rotations

Specific requirements are found in the *associated Courses and Syllabi.*

IMPORTANT NOTE

It can take a substantial amount of time to complete all checks & screens and to compile all required documentation and therefore all students should start the process no later than **70 days before** to the first day of the academic term in which the clinical experience will occur.

Diagnostic Medical Sonography

Purpose

The Diagnostic Medical Sonography program is dedicated to educating students in the art and science of diagnostic imaging through an integrated program of general studies and professional education. Guided by the mission of the University, and in compliance with the Commission on Accreditation of Allied Health Education Programs, the program's primary purpose is to facilitate the personal and professional development of students learning experiences and ongoing evaluative feedback, impact knowledge, skills, and attitudes needed to care for the sick, produce quality diagnostic images, and pursue life-long learning. The program's goal is to prepare competent entry-level general and cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The goal of Mercy College's Diagnostic Medical Sonography program is to prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the Abdominal Sonography-Extended, Obstetrics and Gynecology, and Adult Cardiac Sonography concentrations.

Outcomes

Upon completion of the Diagnostic Medical Sonography major, graduates will be able to:

1. Integrate pertinent patient information and document accurate diagnostic data to facilitate physician interpretation.
2. Comply with recognized ethical and legal standards of the diagnostic medical sonography profession.
3. Utilize effective interpersonal skills with patients and other members of the healthcare team.
4. Develop a commitment to professional development and lifelong learning.

General Sonography Concentration Learning Outcomes

1. Perform appropriate physician-ordered sonographic procedures accurately.
2. Apply knowledge of special procedures to assist a physician in ultrasound-guided examinations.

Cardiac Sonography Concentration Learning Outcomes

1. Perform comprehensive adult echocardiograms procedures accurately.
2. Apply appropriate echocardiography quantification accurately.

Admission Requirements

To be considered for admission to the Diagnostic Medical Sonography (DMS) major, applicants must be admitted to Mercy Health Sciences University (*see Admissions section*) and meet the criteria listed below. Applicants who complete DMS admission requirements at Mercy Health Sciences University will be awarded additional points in the admission process. **Admission to the University does not guarantee admission to a major.**

All applicants must have a minimum cumulative GPA of 2.8 and achieve a "C" or higher (not "C-") in the following University level courses:

- BIO 180 Human Anatomy/with Lab

- ENG 101 English Composition I
- MAT 120 College Algebra or Statistics
- MED 101 Medical Terminology
- 100 Level University Physics/with Lab

Required prerequisites may be in progress while completing the application process. Admission to the major is contingent upon successful completion of all courses in progress with a "C" (not "C-") or better.

All admission requirements listed above must be completed, or coursework must be in progress, by February 28. This includes documentation of video essay and completion of the Ultrasound Student Assessment (USA) Program. i

The USA Program is an assessment tool used as part of the program admission process. Applicants will be assessed a fee of $50.00 and reserve a testing time to take the exam on campus in the testing center. If an applicant is unable to sit for the USA Program on campus, an additional $20.00 proctoring fee will be incurred. Dates for scheduling the USA Program will be determined and communicated by the program.

Highly qualified candidates will need to complete an eight-hour observation and a video interview to be reviewed by the Selection Committee by March 31st. Acceptance letters will be sent to applicants by the end of April. Admission into the major is on a competitive basis. Meeting the minimum criteria does not guarantee admission into the major. Admission into Mercy Health Sciences University also does not guarantee admission into the major. Early application is encouraged as only 30 students can be selected for each fall.

Admission into the major is on a competitive basis. Meeting the minimum criteria does not guarantee admission into the major. Admission into Mercy Health Sciences University also does not guarantee admission into the major. Early application is encouraged. After the enrollment class is full, students qualified for admission will be placed on an alternate list. Students from the alternate list will be added to the fall enrollment class on a space available basis. Students who are not admitted into the major must re-apply for the following year. Students may find it helpful to complete arts and sciences courses at Mercy Health Sciences University prior to admission to the major.

Application Deadlines

Once a student is admitted to the University, an application to the DMS program must be submitted for consideration. Applications to the DMS program are annually due by January 1st.

As part of the application process, applicants must complete the USA Program placement test and submit a video essay by February 28.

All application materials will be reviewed by the Selection Committee. Highly qualified candidates will be invited to complete an eight-hour observation by March 31. Acceptance notifications will be issued to selected applicants in April.

Articulation of Transfer Credit to Diagnostic Medical Sonography

In accordance with University policy, the ASDMS degree accepts arts and sciences courses from accredited institutions for transfer credit. However, transfer credit is not accepted for professional courses in ultrasound. The following will be considered in the approval of transfer credit:

- Similarity of course content.
- Transfer credits applied must have a grade of "C" or higher (not "C-")

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University DMS students. These abilities are based on the job requirements for sonographers at MercyOne Des Moines Medical Center. Applicants must review the following clinical standards to determine their ability and compatibility with physical requirements of sonographers.

Observation Function:
The student will have adequate functional use of visual, auditory, and somatic sensations that allow the student to:

1. actively participate in all demonstrations, laboratory exercises, and clinical experiences and to assess and comprehend the condition of all clients assigned to the student for examination, diagnosis, and treatment.
2. read equipment consoles, patient charts, and other pertinent materials for patient care and professional practice.
3. adequately view sonographic images including color distinctions to determine quality, details, and anatomy demonstrated.
4. see and function in semi-dark settings.
5. distinguish audible sounds from both the patient and the ultrasound equipment (Doppler).

Motor Function:
The student will have adequate and sufficient motor functions that allow the student to:

1. have full use of hands, wrists, and shoulders.
2. stand unassisted or sit for long periods of time.
3. lift more than 50 pounds routinely.
4. bend and stoop routinely.
5. work standing on their feet 80% of the time.
6. assist patients on and off examining tables.
7. transport patients via wheelchair and stretcher.
8. dexterity to manipulate transducer and control panel simultaneously.
9. assist patients, physicians, and staff in emergency situations.

Communication Skills:
The student will have adequate ability to communicate effectively in:

1. the English language using verbal and nonverbal formats with faculty, fellow students, preceptors, patients, and all members of the healthcare team.
2. eliciting information and assessing non-verbal information.
3. accurately transmitting information to patients, staff, fellow students, and other member of the healthcare team.
    - receiving/comprehending, writing, and interpreting verbal and written communication in both academic and clinical setting.

Behavioral and Social Skills:
The student will possess adequate and sufficient:

1. behavioral and social skills conducive to professionalism and a strong work ethic in a University and/or health care environment.

2. ability to withstand a workload that is both physically and emotionally difficult, function under stress, adapt to changing environments, display flexibility, and learn to function in the face of uncertainties inherent in clinical setting with patients.
3. emotional health and stability required for full utilization of the student's intellectual abilities, the exercise of good judgment, the prompt completion of all academic and patient care responsibilities and the development of mature, sensitive, and effective relationships with patients and other members of the healthcare team.
4. compassion, integrity, concern for others, and motivation.

Intellectual Functions:
The student will possess adequate and sufficient:

1. ability to collect, interpret, and integrate information and make decisions.
2. read and comprehend relevant information in textbooks, medical records, and professional literature.
3. ability to retain and apply information.
4. ability to organize and accurately perform the individual steps in a sonographic procedure in proper sequence.
5. ability to apply knowledge and learning to new situations and problem solving scenarios.

Employment Qualifiers:
Future employment in the sonography field will require the student to:

1. be free of communicable disease/illness and chemical dependence.
2. perform all functions and tasks required of a sonographer.
3. reveal conviction of a felony, misdemeanor, or any offense involving moral turpitude. Individuals wishing to determine the impact of a previous criminal proceeding on their eligibility to apply for ARDMS certification should complete the pre-application review (http://www.ardms.org/Discover-ARDMS/compliance/Pages/default.aspx).

Graduation Requirements ASDMS Degree

- Successfully complete all arts and sciences and professional education courses in the curriculum plan with a grade of "C" or higher (not "C-").
- Complete the University residency requirement of 15 credit hours at the associate level.
- Successfully complete all skill challenge exams.
- Successfully complete all clinical competencies.
- Pass the Comprehensive Final Clinical Examination.
- Pass the Mock Registry Examination requirements.
- Satisfactorily complete the University Graduation Requirements.

ASDMS Curriculum – General Concentration

All students must complete the General Education Core Curriculum. General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.

Some courses listed below may fulfill General Education Core Curriculum.

Required Courses for the Major		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
MAT 120	College Algebra or Statistics	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
SVL 285	Servant Leadership	3 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 111	General Lab I	2 credits
DMS 116	Applied General I	4 credits
DMS 118	Applied General II	3 credits
DMS 125	Ultrasound Physics II	2 credits
DMS 126	General Lab II (08A)	1 credit
DMS 129	Abdominal Vascular Lab (07B)	1 credit
DMS 127	General Clinical II	1 credit
DMS 137	General Clinical III	3 credits
DMS 138	General Lab III	1 credit
DMS 211	General Clinical IV	3 credits
DMS 216	Applied General III	4 credits
DMS 226	Applied General IV	3 credits
DMS 231	General Clinical V	3 credits
DMS 234	General Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
PHI 320	Bioethics	3 credits
Total Major Credits: 74		

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

Recommended Course Sequence		
Semester I (Program Prerequisites)		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
Total Credit Hours: 15		

Semester II (Program First Year – Fall Semester)		
BIO 185	Human Physiology w/Lab	4 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 111	General Lab I	2 credits
DMS 116	Applied General I	4 credits
Total Credit Hours: 15		
Semester III (Program First Year – Spring Semester)		
DMS 118	Applied General II	3 credits
DMS 125	Ultrasound Physics II	2 credits
DMS 126	General Lab II (08A)	1 credit
DMS 127	General Clinical II	1 credit
DMS 129	Abdominal Vascular Lab (07B)	1 credit
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 12		
Semester IV (Program First Year – Summer Semester)		
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 102	English Composition II	3 credits
DMS 138	General Lab III	1 credit
DMS 137	General Clinical III	3 credits
DMS 216	Applied General III	4 credits
Total Credit Hours: 14		
Semester V (Program Second Year – Fall Semester)		
DMS 211	General Clinical IV	3 credits
DMS 226	Applied General IV	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 9		
Semester VI (Program Second Year – Spring Semester)		
DMS 231	General Clinical V	3 credits
DMS 234	General Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
PHI 320	Bioethics	3 credits
Total Credit Hours: 9		
Total ASDMS Degree Credits: 74		

Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration, Bachelor of Science in Public Health, or Bachelor of Science in Health Sciences at Mercy Health Sciences University.

ASDMS Curriculum – Cardiac Concentration

Some courses listed below may fulfill general education requirements.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.

Required Courses for the Major		Credits
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra or Statistics	3 credits

MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 107	Cardiac Lab I	2 credits
DMS 115	Applied Cardiac I	4 credits
DMS 117	Applied Cardiac II	3 credits
DMS 122	Cardiac Lab II	2 credits
DMS 123	Cardiac Clinical II	1 credit
DMS 125	Ultrasound Physics II	2 credits
DMS 133	Cardiac Clinical III	3 credits
DMS 134	Cardiac Lab III	1 credit
DMS 209	Cardiac Clinical IV	3 credits
DMS 215	Applied Cardiac III	4 credits
DMS 225	Applied Cardiac IV	3 credits
DMS 230	Cardiac Clinical V	3 credits
DMS 233	Cardiac Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 102	English Composition II	3 credits
PHI 320	Bioethics	3 credits
SVL 285	Servant Leadership	3 credits
Total Major Credit Hours: 74		

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

Graduates of the cardiac concentration are eligible for the Adult Echocardiography credential. The vascular content within the curriculum does not satisfy requirements for Vascular credentialing upon completion of the program.

Recommended Course Sequence		
Semester I (Program Prerequisites)		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
Total Credit Hours: 15		
Semester II (Program First Year – Fall Semester)		
BIO 185	Human Physiology w/Lab	4 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 107	Cardiac Lab I	2 credits
DMS 115	Applied Cardiac I	4 credits
Total Credit Hours: 15		

Semester III (Program First Year – Spring Semester)		
DMS 117	Applied Cardiac II	3 credits
DMS 122	Cardiac Lab II	2 credits
DMS 123	Cardiac Clinical II	1 credit
DMS 125	Ultrasound Physics II	2 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 12		
Semester IV (Program First Year – Summer Semester)		
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 102	English Composition II	3 credits
DMS 134	Cardiac Lab III	1 credit
DMS 133	Cardiac Clinical III	3 credits
DMS 215	Applied Cardiac III	4 credits
Total Credit Hours: 14		
Semester V (Program Second Year – Fall Semester)		
DMS 209	Cardiac Clinical IV	3 credits
DMS 225	Applied Cardiac IV	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 9		
Semester VI (Program Second Year – Spring Semester)		
DMS 230	Cardiac Clinical V	3 credits
DMS 233	Cardiac Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
PHI 320	Bioethics	3 credits
Total Credit Hours: 9		
Total ASDMS Degree Credits: 74		

Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration, Bachelor of Science in Public Health or Bachelor of Science in Health Sciences at Mercy Health Sciences University.

General Vascular/Cardiovascular* Sonography Concentration

Purpose

The Vascular Sonography curriculum is designed to educate students and sonographers who seek to further their skill set in Vascular Sonography. Guided by the mission of the University, the curriculum structure integrates theory and hands-on skill laboratory courses along with clinical experiences to facilitate the professional development in an additional specialty. The program's goal is to prepare competent entry-level vascular sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

*The Vascular curriculum is not currently accredited through CAAHEP. Vascular curriculum includes theory and hands-on skills necessary for the profession but does not lead to board eligibility at this time. Graduates of the Vascular curriculum will require a Registered Vascular Technologist signature on the Clinical Verification form to be eligible to sit for the national registry through the American Registry for Diagnostic Medical Sonography credentialing agency. Graduates from the General Vascular concentration are eligible for the Abdominal and Obstetric/Gynecolgical credentialing exam. Graduates from the CardioVascular concentration are eligible for the Adult Echocardiography credentialing exam through the American Registry for Diagnostic Medical Sonography.

Outcomes

1. Integrate pertinent patient information and document accurate diagnostic data with carotid ultrasounds.
2. Comply with recognized ethical and legal standards of the diagnostic medical sonography profession.
3. Utilize effective interpersonal skills with patients and other members of the healthcare team.
4. Perform comprehensive vascular sonographic procedures accurately.
5. Demonstrate knowledge of appearances, techniques, measurements, and Doppler flow characteristics in normal and abnormal vascular structures.

Admission Requirements

To be considered for admission to the Vascular Sonography program, applicants must be admitted to Mercy Health Sciences University (See Admissions section) and meet one of the criteria listed below. Admission to the University does not guarantee admission to the program.

Requirement 1: Current Mercy Health Sciences University ASDMS students must have a minimum cumulative GPA of 3.0 and must have successfully passed the American Registry for Diagnostic Medical Sonography (ARDMS) Sonography Principles and Instrumentation board exam. Mercy Health Sciences University ASDMS students must also in addition to the above requirements:

- Demonstrate current proficiency in technical scanning skills and competencies

- Have successfully completed all current MCHS DMS coursework
- Submit a written essay expressing their interest in the vascular sonography program
- Understand that selection is dependent upon clinical site availability

Requirement 2: Sonographers must have graduated from an accredited program by the Joint Review Committee on Education – Diagnostic Medical Sonography (JRC- DMS) and hold an active credential with the American Registry for Diagnostic Medical Sonography (ARDMS).

Application Deadline

Once admitted to the University, an application to the Vascular Sonography program must be submitted for consideration. Applications to the program are due annually on the third Monday of June. Students admitted to the program will be announced by the third Monday of July.

Clinical Standards

Observation Function

The student will have adequate functional use of visual, auditory, and somatic sensations that allow him/her to:

1. actively participate in all demonstrations, laboratory exercises, and clinical experiences and to assess and comprehend the condition of all clients assigned to him/her for examination, diagnosis, and treatment.
2. read equipment consoles, patient charts, and other pertinent materials for patient care and professional practice.
3. adequately view sonographic images including color distinctions to determine quality, details, and anatomy demonstrated.
4. see and function in semi-dark settings.
5. distinguish audible sounds from both the patient and the ultrasound equipment (Doppler).

Motor Function

The student will have adequate and sufficient motor functions that allow him/her to:

1. have full use of hands, wrists, and shoulders.
2. stand unassisted or sit for long periods of time.
3. lift more than 50 pounds routinely.
4. bend and stoop routinely.
5. work standing on their feet 80% of the time.
6. assist patients on and off examining tables.
7. transport patients via wheelchair and stretcher.
8. dexterity to manipulate transducer and control panel simultaneously.
9. assist patients, physicians, and staff in emergency situations.

Communication Skills

The student will have adequate ability to communicate effectively in:

1. the English language using verbal and nonverbal formats with faculty, fellow students, preceptors, patients, and all members of the healthcare team.
2. eliciting information and assessing non-verbal information.
3. accurately transmitting information to patients, staff, fellow students, and other member of the healthcare team.
4. receiving/comprehending, writing and interpreting verbal and written communication in both academic and clinical setting.

Behavioral and Social Skills

The student will possess adequate and sufficient:

1. behavioral and social skills conducive to professionalism and a strong work ethic in a University and/or health care environment.
2. ability to withstand a workload that is both physically and emotionally difficult, function under stress, adapt to changing environments, display flexibility, and learn to function in the face of uncertainties inherent in clinical setting with patients.
3. emotional health and stability required for full utilization of the student's intellectual abilities, the exercise of good judgment, the prompt completion of all academic and patient care responsibilities and the development of mature, sensitive, and effective relationships with patients and other members of the healthcare team.
4. compassion, integrity, concern for others, and motivation.

Intellectual Functions

The student will possess adequate and sufficient:

1. ability to collect, interpret, and integrate information and make decisions.
2. read and comprehend relevant information in textbooks, medical records, and professional literature.
3. ability to retain and apply information.
4. ability to organize and accurately perform the individual steps in a sonographic procedure in proper sequence.
5. ability to apply knowledge and learning to new situations and problem solving scenarios.

Employment Qualifiers

Future employment in the sonography field will require the student to:

1. be free of communicable disease/illness and chemical dependence.
2. perform all functions and tasks required of a sonographer.
3. reveal conviction of a felony, misdemeanor, or any offense involving moral turpitude. Individuals wishing to determine the impact of a previous criminal proceeding on their eligibility to apply for ARDMS certification should complete the pre-application review (http://www.ardms.org/Discover-ARDMS/compliance/Pages/default.aspx)

Graduation Requirements

- Successfully complete all proficiency skill challenge exams
- Successfully complete all clinical competencies
- Pass the Comprehensive Final Clinical Examination.
- Pass the Mock Registry Examination requirements.
    - Satisfactorily complete the University Graduation Requirements

ASDMS Curriculum – General Vascular Concentration

Some courses listed below may fulfill general education requirements.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.

Required Courses for the Major		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
MAT 120	College Algebra or Statistics	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
SVL 285	Servant Leadership	3 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 111	General Lab I	2 credits
DMS 116	Applied General I	4 credits
DMS 118	Applied General II	3 credits
DMS 125	Ultrasound Physics II	2 credits
DMS 126	General Lab II (08A)	1 credit
DMS 129	Abdominal Vascular Lab (07B)	1 credit
DMS 127	General Clinical II	1 credit
DMS 137	General Clinical III	3 credits
DMS 138	General Lab III	1 credit
DMS 234	General Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
DMS 274	General Vascular Clinical IV	3 credits
DMS 216	Applied General III	4 credits
DMS 226	Applied General IV	3 credits
DMS 270	Vascular Lab I	2 credits
DMS 271	Vascular Applied I	3 credits
DMS 272	Vascular Lab II (08A)	1 credit
DMS 273	Vascular Applied II (08A)	2 credits
DMS 275	General Vascular Clinical V	3 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
PHI 320	Bioethics	3 credits
Total Major Credits: 82		

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

Recommended Course Sequence		
Semester I (Program Prerequisites)		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
Total Credit Hours: 15		
Semester II (Program First Year – Fall Semester)		
BIO 185	Human Physiology w/Lab	4 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 111	General Lab I	2 credits
DMS 116	Applied General I	4 credits
Total Credit Hours: 15		
Semester III (Program First Year – Spring Semester)		
DMS 118	Applied General II	3 credits
DMS 125	Ultrasound Physics II	2 credits
DMS 126	General Lab II (08A)	1 credit
DMS 129**	Abdominal Vascular Lab (07B)**	1 credit
DMS 127	General Clinical II (08A)	1 credit
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 12		
Semester IV (Program First Year – Summer Semester)		
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 102	English Composition II	3 credits
DMS 138	General Lab III	1 credit
DMS 137	General Clinical III	3 credits
DMS 216	Applied General III	4 credits
Total Credit Hours: 14		
Semester V (Program Second Year – Fall Semester)		
DMS 226	Applied General IV	3 credits
DMS 270	Vascular Lab I	2 credits
DMS 271	Vascular Applied I	3 credits
DMS 274	General Vascular Clinical IV	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 14		
Semester VI (Program Second Year – Spring Semester)		
DMS 234	General Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
DMS 272	Vascular Lab II (08A)	1 credit
DMS 273	Vascular Applied II (08A)	2 credits
DMS 275	General Vascular Clinical V	3 credits
PHI 320	Bioethics	3 credits
Total Credit Hours: 12		

Total ASDMS Degree Credits: 82	

** DMS 129 Abdominal Vascular Lab is embedded within the General concentration. Students entering the Vascular Sonography program who have not completed this course (or equivalent) will be required to enroll in this course which is offered in the Spring semester.

ASDMS Curriculum – Cardiovascular Concentration

Some courses listed below may fulfill general education requirements.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.

Required Courses for the Major		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
MAT 120	College Algebra or Statistics	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
SVL 285	Servant Leadership	3 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 107	Cardiac Lab I	2 credits
DMS 115	Applied Cardiac I	4 credits
DMS 117	Applied Cardiac II	3 credits
DMS 122	Cardiac Lab II	2 credits
DMS 123	Cardiac Clinical II	1 credit
DMS 125	Ultrasound Physics II	2 credits
DMS 129	Abdominal Vascular Lab (07B)	1 credit
DMS 133	Cardiac Clinical III	3 credits
DMS 134	Cardiac Lab III	1 credit
DMS 215	Applied Cardiac III	4 credits
DMS 225	Applied Cardiac IV	3 credits
DMS 233	Cardiac Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
DMS 270	Vascular Lab I	2 credits
DMS 271	Vascular Applied I	3 credits
DMS 272	Vascular Lab II (08A)	1 credit
DMS 273	Vascular Applied II (08A)	2 credits
DMS 276	Cardio-Vascular Clinical IV	3 credits
DMS 277	Cardio-Vascular Clinical V	3 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
PHI 320	Bioethics	3 credits
Total Major Credits: 83		

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

Recommended Course Sequence		
Semester I (Program Prerequisites)		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra	3 credits
MED 101	Medical Terminology	1 credit
PHY 101	100 Level University Physics/with Lab	4 credits
Total Credit Hours: 15		
Semester II (Program First Year – Fall Semester)		
BIO 185	Human Physiology w/Lab	4 credits
DMS 101	Foundations of Ultrasound	3 credits
DMS 103	Ultrasound Physics I	2 credits
DMS 107	Cardiac Lab I	2 credits
DMS 115	Applied Cardiac I	4 credits
Total Credit Hours: 15		
Semester III (Program First Year – Spring Semester)		
DMS 117	Applied Cardiac II	3 credits
DMS 122	Cardiac Lab II	2 credits
DMS 123	Cardiac Clinical II	1 credit
DMS 125	Ultrasound Physics II	2 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 12		
Semester IV (Program First Year – Summer Semester)		
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 102	English Composition II	3 credits
DMS 134	Cardiac Lab III	1 credit
DMS 133	Cardiac Clinical III	3 credits
DMS 215	Applied Cardiac III	4 credits
Total Credit Hours: 14		
Semester V (Program Second Year – Fall Semester)		
DMS 225	Applied Cardiac IV	3 credits
DMS 270	Vascular Lab I	2 credits
DMS 271	Vascular Applied I	3 credits
DMS 276	Cardio-vascular Clinical IV	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 14		
Semester VI (Program Second Year – Spring Semester)		
DMS 233	Cardiac Seminar	2 credits
DMS 235	DMS Career Preparation	1 credit
DMS 272	Vascular Lab I (08A)	1 credit
DMS 273	Vascular Applied I (08A)	2 credits
DMS 277	Cardio-Vascular Clinical V	3 credits
DMS 129**	Abdominal Vascular Lab (07B)**	1 credit
PHI 320	Bioethics	3 credits
Total Credit Hours: 13		
Total ASDMS Degree Credits: 83		

** DMS 129 Abdominal Vascular Lab is embedded within the General concentration. Students entering the Vascular Sonography program who have not completed this course (or equivalent) will be required to enroll in this course which is offered in the Spring semester.

Emergency Medical Services

Purpose

The Emergency Medical Services (EMS) programs are dedicated to educating students through coursework that integrates academic and professional education, skills laboratories, and hospital and EMS internship. Guided by the mission of Mercy Health Sciences University, and in compliance with the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on Accreditation of Emergency Medical Service Programs (CoAEMSP), the primary purpose is to facilitate the personal and professional development of students. The EMS programs provide students with the academic and clinical experiences needed to become caring, ethical, and competent healthcare workers. The EMS programs are designed to provide continuous education spanning an EMS career. From entry level Emergency Medical Technician through Critical Care Paramedic and/or Associate of Science Degree in EMS, Mercy Health Sciences University is a resource to help students achieve their goals in the area of Emergency Medical Services education and career advancement.

Clinical/Field Standards

The following clinical standards are required of Mercy Health Sciences University EMS Students. These abilities are based on the functional job description published by the Committee on Accreditation of EMS Education Programs (CoAEMSP). Applicants must review the following clinical standards to determine their ability and compatibility with physical requirements of an EMS provider.

Physical Activity Requirements

Constant

Talking – Expressing or exchanging ideas by means of the spoken word to convey information to physicians, patients and colleagues.
Hearing – Ability to receive detailed information through oral communications with physicians, patients and colleagues.
Walking – Moving about on foot to accomplish tasks such as transferring equipment or transferring patients.
Driving – Sitting while driving a vehicle.
Stooping – Bending at the waist while getting into and out of vehicle.
Handling – Working with whole hand to drive vehicle, to load/unload supplies, materials into and from vehicle.
Reaching – Extending hand(s) and arm(s) in any direction to load/unload and deliver material supplies into and from vehicle.

Frequent

Climbing – In and out of the ambulance.
Balancing – Maintaining body equilibrium to prevent falling when standing or stooping or crouching inside of the ambulance while it is in motion.
Stooping – Bending body downward and forward by bending spine at the waist in order to provide patient care or retrieving equipment from storage areas.
Pushing – Using upper extremities to press against something with steady force in order to thrust forward when transferring a patient or equipment on a cart, or downward such as in cardiopulmonary resuscitation.
Pulling – Using upper extremities to exert force in order to move patients in a sustained motion.

Lifting – Raising objects from a lower to a higher position such as when loading patients who most often weigh in excess of 200 pounds or transferring equipment in and out of the ambulance.

Occasional

Kneeling – Bending legs at knee to come to a rest on knee or knees when providing patient care inside the ambulance.
Crouching – Bending the body downward and forward by bending leg and spine when providing patient care at the site of a scene, in a hospital or inside the ambulance.
Reaching – Extending hand(s) and arms in any direction when providing patient care in the ambulance.
Standing – Particularly for sustained periods of time.
Fingering – Working primarily with fingers rather than the whole hand.
Grasping – Applying pressure to an object with the fingers and palm such as blood pressure cuffs bulbs, I.V. infusion bags, Ambu bags and radios.
Feeling – Perceiving attributes of objects, especially with fingertips such as assessing skin or potential injuries.
Repetitive Motions – Performing chest compressions for a minimum of 10 minutes.

Physical Demand Requirements

Heavy clinical assignments – Exerting in excess of 100 pounds of force occasionally, and/or in excess of 40 pounds of force frequently, and/or in excess of 20 pounds of force constantly to set up traction, hold extremities, move objects, to transfer patients onto emergency carts from wheelchairs.

Visual Acuity Requirements

During clinical, assignments require the use of equipment with small buttons and numbers, which requires absolute accuracy. Must have environmental visual acuity in both daylight and at night.

Intellectual/Emotional Requirements

Students must be able to:

- Be responsible for interventions and planning of patient care. Interprets feelings, ideas or facts in terms of personal viewpoint.
- Make generalizations, evaluations, or decisions based on sensory or judgmental criteria.
- Make generalizations, evaluations, or decisions based on measurable or verifiable criteria.
- Deal with people beyond giving and receiving instructions.
- Perform under stress when confronted with emergency, critical, unusual or dangerous situations; or situations in which working speed and sustained attention are make-or-break aspects of the job.
- Perform a variety of duties, often changing from one task to another without loss of efficiency or composure.

Tools/Equipment

Tools and equipment based on certification level and relevant Iowa Scope of Practice.

Clinical Conditions

- Students must be able to wear installed lap and shoulder seatbelts.
- The student is subject to environmental conditions with activities occurring both inside and outside. The student is subject to extreme temperatures (below 32 degrees to above 100 degrees).

- The student is required to wear protective appliances such as gloves, masks, and goggles when caring for patients and the potential exposure of blood and bodily fluids exists, in accordance with Standard Precautions.
- Students in a clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials, therefore, are included in the OSHA Exposure Plan with specifications for preventing contact with infectious diseases.

The student is subject to exposure to combative, physically, or abusive patients.

- The student is subject to hazards in the work area; may be exposed to chemotherapy spills, chemical cleaners, radioactive implants/isotopes, and/or sharp instruments.
- The student is subject to a range of noise levels from quiet to moderate phones, pagers, mechanical alarms (IV pumps, ventilators, cardiac monitors, pulse oximeters) and occasional construction work.

Emergency Medical Technician Certificate (EM 109)

Purpose

The Emergency Medical Technician (EMT) certificate is offered to provide an entry level course to students who may be interested in Emergency Medical Services. This course is also an excellent course for students who are interested in becoming a healthcare provider but may be unsure of which healthcare profession to enter. The course focuses on emergency care but has content covering medical and traumatic emergencies, adult and pediatric patients, acute and chronic medical conditions. Lecture and skills laboratories are evenly balanced to meet the learning needs of the "hands on" learner as well as those who perform better in a classroom environment.

Students must complete 24 hours of clinical rotations in the Emergency Department where students are permitted to work with a variety of patients while having an opportunity to observe several healthcare disciplines. Students also participate in 24 hours of field internship as a member of an EMS crew responding to 911 calls. Students must also complete a minimum number of patient contacts and clinical skills during the internship portion of the course. Classes are taught by leading professionals in the field. EMT is the "gateway" course for all other levels of EMS Certification.

EMT Outcomes

Upon completion of the Emergency Medical Technician certificate, the student will:

1. Competently perform entry level EMT skills.
2. Demonstrate professionalism and therapeutic communication appropriate to the pre-hospital and clinical environment.
3. Demonstrate legal and ethical conduct suitable to the profession.
4. Effectively participate as an integral part of a healthcare team by assisting providers and promoting positive patient relations.
5. Qualify to sit for the National Registry EMT Exam.
6. Practice guided by the core values of Mercy.

EMT Admission Requirements

1. Complete and submit the online registration form through the Mercy Health Sciences University Training Center.
2. Complete an EMT registration packet:
    - Initiate a criminal background and a child and adult abuse check with the College's approved clinical compliance database along with the required payment to the vendor. The student must authorize the preferred vendor to provide the results of these checks prior to final admission to the short-term certificate.
    - Initiate the creation of an Electronic Health Records (I) with the College's approved clinical compliance database in order to complete a Clinical Standards form, and Immunization form. It is advised to submit the Immunization form to your primary healthcare provider as soon as possible in order to ensure its completion in advance of the University deadline. The Immunization form will need to verify compliance with the following:
        - Two-step TB skin testing within the past year; then one-step TB skin test yearly after admission. Acceptable alternatives to TB skin testing are a negative T-spot blood test OR a negative QuantiFERON Gold blood test. If a positive

skin test or a history of positive tests, a negative chest-ray report administered within the past 12 months is required; then a TB Questionnaire completed yearly after admission (form provided by Student Success Center).

- Hepatitis B: Completion of series (three doses), OR initiation of the Hepatitis B series (if series is in process, student must meet all immunization deadlines per CDC guidelines to remain in clinicals or practicums), OR a positive titer showing full immunity.
- Measles, Mumps, and Rubella (MMR): Completion of series (two doses) OR positive titers of all three diseases showing full immunity.
- Chicken Pox (Varicella): Completion of series (two doses), OR positive titer showing full immunity, OR proof of disease by medical provider documentation.
- Seasonal flu vaccination is required annually to participate in courses that include a clinical rotation during flu season.

3. Complete a 10-panel drug screen to ensure patient safety and compliance with clinical site requirements. The screen must be arranged via the College's approved clinical compliance database and paid for in advance. Please consult the Student Handbook for additional details on arranging a drug screen.
4. Show proof of completion and current certification in American Heart Association Basic Life Support Provider or Red Cross BLS for Health Care Providers.

Post-Admission Procedure

Iowa Department of Public Health Requirement: EMS applicants must complete the EMS Student Registration within 10 days after the course start date. EMS Student Registration must be completed at the IDPH, Bureau of Emergency and Trauma Services website. Assistance is provided during orientation/registration.

Course Completion Requirements

Students must meet the following requirements to receive the Emergency Medical Technician Certificate:

- Successful completion of all didactic, laboratory coursework.
- Successful completion of all clinical/field coursework.

Non-Credit Option

Students may take EMT courses through the training center for non-credit. When taken for non-credit, all University policies and procedures apply to these courses as well.

Paramedic Certificate

Purpose

The Paramedic Certificate program is offered to prepare students to provide the highest level of care permitted in the pre-hospital environment by EMS personnel. The Paramedic Certificate encompasses approximately 12 months of didactic study in either a day or evening program format. A portion of the clinical and field practicum may be completed after the didactic coursework is finished; however, students generally have sufficient time to complete clinical/field requirements within 30 days following the last day of class. The program includes classroom instruction, practice in skills lab, and clinical experience in a variety of hospital departments, and EMS agencies.

Outcomes

Upon completion of the Paramedic Certificate graduates will:

1. Competently perform entry level Paramedic skills.
2. Demonstrate professionalism and therapeutic communication appropriate to the pre-hospital and clinical environment.
3. Demonstrate legal and ethical conduct suitable to the profession.
4. Effectively participate as an integral part of a healthcare team by assisting providers and promoting positive patient relations.
5. Qualify to sit for the National Registry Paramedic Exam.
6. Practice guided by the core values of Mercy.

Admission Requirements for the Paramedic Certificate

To be considered for admission to the Paramedic Certificate program, applicants must be admitted to Mercy Health Sciences University. Admission to the University automatically admits the student to the paramedic program.

Once the student is admitted to the Paramedic program, the student must provide evidence of current Iowa EMT certification to be eligible to register for courses which are part of the paramedic curriculum. Students will also participate in a program of success orientation to determine what resources may be of benefit to the students that are currently offered by Mercy Health Sciences University.

Admission to the Paramedic Certificate program requires applicants to have either current certification as an Iowa EMT, or certification by the first day of class.

Graduation Requirements Paramedic Certificate

Students must meet the following requirements to receive a Paramedic Certificate:

- Successfully complete all professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
- Complete the University residency requirement of 15 credit hours.
- Successfully complete all skills proficiency exams, including the Medical Director Exit Interview.
- Satisfactorily complete the University Graduation Requirements.

Paramedic Certificate Curriculum

Required Courses for the Certificate		
EMS 110	Foundations of Paramedic Practice I *	4 credits
EMS 111	Foundations of Paramedic Practice II	3 credits
EMS 112	EMS Skills Lab I	2 credits
EMS 113	Clinical I	2 credits
EMS 114	Field Practicum I	1 credit
EMS 130	Management of Medical Emergencies	4 credits
EMS 131	Management of Traumatic Emergencies	3 credits
EMS 132	EMS Skills Lab II	1 credit
EMS 133	Clinical II	2 credits
EMS 134	Field Practicum II	2 credits
EMS 160	Care of Special Populations	3 credits
EMS 161	EMS Operations	3 credits
EMS 162	Transition to EMS Team Leader	2 credits
EMS 163	Clinical III	2 credits
EMS 164	Field Practicum III	2 credits
Total Paramedic Certificate Credit Hours: 36		

* Servant Leadership Workshop embedded within EMS 110

Recommended Course Sequence		
Semester I		
EMS 110	Foundations of Paramedic Practice I *	4 credits
EMS 111	Foundations of Paramedic Practice II	3 credits
EMS 112	EMS Skills Lab I	2 credits
EMS 113	Clinical I	2 credits
EMS 114	Field Practicum I	1 credit
Total Credit Hours: 12		
Semester II		
EMS 130	Management of Medical Emergencies	4 credits
EMS 131	Management of Traumatic Emergencies	3 credits
EMS 132	EMS Skills Lab II	1 credit
EMS 133	Clinical II	2 credits
EMS 134	Field Practicum II	2 credits
Total Credit Hours: 12		
Semester III		
EMS 160	Care of Special Populations	3 credits
EMS 161	EMS Operations	3 credits
EMS 162	Transition to EMS Team Leader	2 credits
EMS 163	Clinical III	2 credits
EMS 164	Field Practicum III	2 credits
Total Credit Hours: 12		
Total Paramedic Certificate Credits: 36		

Associate of Science in Emergency Medical Services

Purpose

The Associate of Science in Emergency Medical Services (ASEMS) degree is offered for students who wish to earn a degree as a credential to indicate completion of a University-based degree in Emergency Medical Services. The degree indicates a student has completed an educational experience that includes arts and science courses in addition to the professional courses in the major. An ASEMS degree may be earned concurrently or following completion of the Paramedic Certificate by taking an additional 30 credit hours of arts and science courses.

Outcomes

Upon completion of the Emergency Medical Services major, graduates will:

1. Competently perform entry level Paramedic skills.
2. Demonstrate professionalism and therapeutic communication appropriate to the pre-hospital and clinical environment.
3. Demonstrate legal and ethical conduct suitable to the profession.
4. Effectively participate as an integral part of a healthcare team by assisting providers and promoting positive patient relations.
5. Qualify to sit for the National Registry Paramedic exam.
6. Practice guided by the core values of Mercy.
7. Combine knowledge from arts and sciences and emergency medical services with critical thinking skills to function effectively as a paramedic.
8. Demonstrate the ability to think critically and communicate effectively.
9. Articulate personal values in relation to ethical standards.
10. Display leadership through service-oriented activities.

Admission Requirements

To be considered for admission to the ASEMS applicants must be admitted to Mercy Health Sciences University. Admission to the University automatically admits the student to the ASEMS program.

Once the student is admitted to the paramedic program, the student must provide evidence of current Iowa EMT certification to be eligible to register for courses which are part of the paramedic curriculum. Students will also participate in a program success orientation to determine what resources may be of benefit to the student that are currently offered by Mercy Health Sciences University.

Graduation Requirements ASEMS Degree

Students must meet the following requirements to receive an Associate of Science in Emergency Medical Services degree:

- Successfully complete all arts and sciences and professional education courses in the curriculum plan with a grade of "C" or higher (not "C-").
- Complete the University residency requirement of 15 credit hours at the associate level.
- Successfully complete applicable Exit requirements for Paramedic Certificate.
- Satisfactorily complete the University Graduation Requirements.

Students with this associate degree may pursue a Bachelor of Science in Healthcare Administration or Bachelor of Science in Health Science at Mercy Health Sciences University.

ASEMS Curriculum

The Arts and Science courses for the General Education Core requirement of the Associate of Science in Emergency Medical Services Degree may be completed before, concurrently or after courses for the major.

General Education Core requirements may be found in the Academic Policies and Procedures section of the Catalog.

Required Courses for the Major		Credits
BIO 180	Human Anatomy w/Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
	Core elective – 100 level or higher	3 credits
EMS 110	Foundations of Paramedic Practice I	4 credits
EMS 111	Foundations of Paramedic Practice II	3 credits
EMS 112	EMS Skills Lab I	2 credits
EMS 113	Clinical Internship I	2 credits
EMS 114	Field Practicum I	1 credit
EMS 130	Management of Medical Emergencies	4 credits
EMS 131	Management of Traumatic Emergencies	3 credits
EMS 132	EMS Skills Lab II	1 credit
EMS 133	Clinical Internship II	2 credits
EMS 134	Field Practicum II	2 credits
EMS 160	Care of Special Populations	3 credits
EMS 161	EMS Operations	3 credits
EMS 162	Transition to EMS Team Leader	2 credits
EMS 163	Clinical Internship III	2 credits
EMS 164	Field Practicum III	2 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
	Humanities elective – 100 level or higher	3 credits
	MAT – 100 level or higher	3 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
SVL 285	Servant Leadership	3 credits
Total Major Credits: 66		

Recommended Course Sequence		
Semester I		
BIO 180	Human Anatomy w/Lab	4 credits
PSY 101	General Psychology	3 credits
EMS 110	Foundations of Paramedic Practice I	4 credits
EMS 111	Foundations of Paramedic Practice II	3 credits
EMS 112	EMS Skills Lab I	2 credits
Total Credit Hours: 16		
Semester II		
EMS 113	Clinical Internship I	2 credits
EMS 114	Field Practicum I	1 credit

BIO 185	Human Physiology w/Lab	4 credits
ENG 101	English Composition I	3 credits
	MAT – 100 level or higher	3 credits
Total Credit Hours: 13		
Semester III		
EMS 130	Management of Medical Emergencies	4 credits
EMS 131	Management of Traumatic Emergencies	3 credits
EMS 132	EMS Skills Lab II	1 credit
	Humanities elective – 100 level or higher	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 12		
Semester IV		
EMS 133	Clinical Internship II	2 credits
EMS 134	Field Practicum II	2 credits
ENG 102	English Composition II	3 credits
	Core elective – 100 level or higher	3 credits
EMS 160	Care of Special Populations	3 credits
Total Credit Hours: 13		
Semester V		
EMS 161	EMS Operations	3 credits
EMS 162	Transition to EMS Team Leader	2 credits
EMS 163	Clinical Internship III	2 credits
EMS 164	Field Practicum III	2 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 12		
Total ASEMS Degree Credits – 66		

Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration or Bachelor of Science in Health Science at Mercy Health Sciences University.

Critical Care Paramedic (EM 270)

Purpose

This course is offered for students who are seeking preparation for national certification as a Critical Care Paramedic, flight paramedic, certified flight registered nurse, or Iowa endorsement as a Critical Care Paramedic (CCP). Through a combination of didactic, lab, clinical internship, and field practicum with an aeromedical transport service, graduates are prepared to perform patient care skills for acutely ill and/or injured patients beyond the traditional role of a paramedic. Topics from the course include flight physiology, hemodynamic monitoring, fetal heart monitoring, advanced pharmacology, and mechanical circulatory and ventilatory support.

PREREQUISITE: Current certification at the NREMTP, NRP, or Iowa Paramedic Level.

Outcomes

Upon completion of the Critical Care Paramedic course graduates will:

1. Competently perform entry level CCP skills.
2. Demonstrate professionalism and therapeutic communication appropriate to the pre-hospital and clinical environment.
3. Demonstrate legal and ethical conduct suitable to the profession.
4. Effectively participate as an integral part of a healthcare team by assisting providers and promoting positive patient relations.
5. Qualify to sit for the National CCP exam through the Board for Critical Care Transport Paramedic Certification (BCCTPC) and receive recommendation for Iowa CCP endorsement.
6. Practice guided by the core values of Mercy.

Critical Care Paramedic Admission Requirements

1. Complete and submit the online registration form through the Mercy Health Sciences University Training Center.
2. Complete an CCP registration packet:
    - Initiate a criminal background and a child and adult abuse check with the College's approved clinical compliance database along with the required payment to the vendor. The student must authorize this vendor to provide the results of these checks prior to final admission to the short-term certificate.
3. Initiate the creation of an Electronic Health Records (I) with the College's approved clinical compliance database in order to complete a Clinical Standards form, and Immunization form. It is advised to submit the Immunization form to your primary healthcare provider as soon as possible in order to ensure its completion in advance of the University deadline. The Immunization form will need to verify compliance with the following:
        - Two-step TB skin testing within the past year; then one-step TB skin test yearly after admission. Acceptable alternatives to TB skin testing are a negative T-spot blood test OR a negative QuantiFERON Gold blood test. If a positive skin test or a history of positive tests, a negative chest-ray report administered within the past 12 months is required; then a TB questionnaire completed yearly after admission (form provided by Student Success Center).

- Hepatitis B: Completion of series (three doses), OR initiation of the Hepatitis B series (if series is in process, student must meet all immunization deadlines per CDC guidelines to remain in clinicals or practicums), OR a positive titer showing full immunity.
- Measles, Mumps, and Rubella (MMR): Completion of series (two doses) OR positive titers of all three diseases showing full immunity.
- Chicken Pox (Varicella): Completion of series (two doses), OR positive titer showing full immunity, OR proof of disease by medical provider documentation.
- Seasonal flu vaccination is required annually to participate in courses that include a clinical rotation during flu season.

4. Show proof of completion and current certification in American Heart Association Basic Life Support Provider
5. To ensure the safety of those in our community and University community, as well as adherence to state and local licensure laws and regulations, mandatory and reasonable suspicion drug testing is required at Mercy Health Sciences University for all students in a program with a clinical component. Consult the Student Handbook for additional information.

Course Completion Requirements

Students must meet the following requirements to receive the Critical Care Paramedic Certificate:

- Successful completion of all didactic, laboratory coursework.
- Successful completion of all clinical/field coursework.

Non-Credit Option

Students may take EMT courses through the training center for non-credit. When taken for non-credit, all University policies and procedures apply to these courses as well.

Health Science (Associate of Science)

Purpose

The Associate of Science in Health Sciences (ASHS) will provide an orientation to the health sciences, including all foundational courses required for admission to all Mercy Health Sciences University health programs.

Outcomes

In addition to furthering the vision and fulfilling the mission of Mercy Health Sciences University, the Associate of Science Degree is designed to achieve the following outcomes:

1. Communicate verbally and non-verbally.
2. Demonstrate knowledge of the health sciences.
3. Apply mathematical principles in the biological and physical sciences.
4. Display behaviors consistent with Mercy's core values as servant leaders.

Admission Requirements

To be considered for admission to the Associate of Science Degree program, applicants must meet the following criteria:

- Be admitted to Mercy Health Sciences University (See Admissions section).

Graduation Requirements ASHS Degree

Students must meet the following requirements to receive an Associate of Science in Health Science Degree:

- Successfully complete all requirements of the Associate of Science curriculum plan.
- Completion of all required courses with a C or better in all courses (not a C-) including transfer courses.
- Fulfillment of the residency requirement of the University for the Associate degree, which is a minimum of 15 credit hours in residency at Mercy Health Sciences University. The final 12 semester credit hours must be taken at Mercy Health Sciences University.
- Complete all Mercy Health Sciences University requirements and procedures for graduation—including the Graduate Exit Survey.
- Completion of coursework and graduation requirements within six years following admission into the program.

Health Sciences Pathways

Overview

Health Sciences Pathways are structured academic options designed for students seeking admission into Mercy College's competitive and limited-capacity allied health and nursing programs. These pathways provide an entry point for students to enroll in a Health Sciences degree program while completing prerequisite coursework required for application to their intended professional program.

Students admitted under a Health Sciences Pathway are degree-seeking students who follow a unified academic plan that incorporates both Health Sciences core requirements and program-specific prerequisite coursework. This structure supports timely progression, informed decision-making, and degree completion regardless of admission outcomes to selective programs.

Admission to a Health Sciences Pathway does not guarantee acceptance into a professional program.

Available Pathways
Students select an intended pathway at the time of application. Available pathways include:

- Accelerated Physical Therapist Assistant (PTA)
- Diagnostic Medical Sonography (DMS)
- Nursing, Associate Degree (ASN)
- Radiologic Technology (RT)

Curriculum Structure
Each Health Sciences Pathway includes:

1. Health Sciences Core Requirements: Foundational coursework supporting healthcare knowledge, communication, and professional readiness.
2. Program Prerequisite Coursework: Courses required for application to the intended professional program. These courses simultaneously satisfy Health Sciences degree requirements where applicable.

Professional program-specific courses (i.e., courses taken only after formal program admission) are not included in the Health Sciences degree audit.

ASHS Curriculum

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements. Students in the ASHS program with the goal of meeting the admissions requirements for a different or additional program should work with their advisors to schedule the appropriate pre-requisite courses.

Required Courses for the Major		Credits
BIO 101	General Biology I (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 130 or BIO 203	Principles of Microbiology w/Lab or Microbiology (w/Lab)	4 credits
BIO 225 or BIO 302	Principles of Pathophysiology or Pathophysiology	3 credits
CHE 100 or CHE 101	Chemistry for Health Professionals or General Chemistry I (w/Lab)	3 or 4 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
AHS 101	Healthcare Career Exploration	1 credit
HUM ###	Humanities Elective	3 credits
MAT ###	College-Level Math (e.g., Math for General Studies, Math for Health Professionals, or College Algebra)	3 credits
MED 101	Medical Terminology	1 credit
NTR 205	Nutrition	3 credits
PHI ### or REL ###	Philosophy or Religion Elective	3 credits
PHY 101	Physics I	4 credits
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
SOC 102	Sociology	3 credits
SPE 105	Small Group Communications	1 credit

STA ###	College-Level Statistics (e.g., Fundamentals of Statistics or Biostatistics)	3 credits
SVL 285	Servant Leadership	3 credits
Total Major Credits: 62		

Recommended Course Sequence		
Semester I		
BIO 101	General Biology I (w/Lab)	4 credits
ENG 101	English Composition I	3 credits
AHS 101	Healthcare Career Exploration	1 credit
MAT ###	College-Level Math College	3 credits
ENG 101	English Composition I	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 15		
Semester II		
BIO 180	Human Anatomy (w/Lab)	4 credits
CHE 100 or CHE 101	Chemistry for Health Professionals or General Chemistry I (w/Lab)	3 or 4 credits
ENG 102	English Composition II	3 credits
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communications	1 credit
Total Credit Hours: 14 or 15		
Semester III		
BIO 185	Human Physiology (w/Lab)	4 credits
HUM ###	Humanities Elective	3 credits
PHY 101	Physics I	4 credits
PHI ### or REL ###	Philosophy or Religion Elective	3 credits
SOC 102	Sociology	3 credits
Total Credit Hours: 17		
Semester IV		
BIO 130 or BIO 203	Principles of Microbiology w/Lab or Microbiology (w/Lab)	4 credits
BIO 225 or BIO 302	Principles of Pathophysiology or Pathophysiology	3 credits
NTR 205	Nutrition	3 credits
PSY 202	Developmental Psychology	3 credits
STA ###	College-Level Statistics	3 credits
Total Credit Hours: 16		
Total ASHS Degree Credits: 62		

Health Science (Bachelor of Science)

Purpose

The Bachelor of Science in Health Science (BSHS) major will prepare students for graduate education (M.S., Ph.D.) and provide a preparatory program for careers, including but not limited to: physician's assistant (P.A.), medicine (M.D., D.O.), dentistry (D.M.D., D.D.S), veterinary medicine (D.V.M), physical therapy (P.T.), optometry, podiatric medicine, medical laboratory science, industrial research and design, and pharmacology.

Outcomes

Graduates of the Bachelor of Sciences in Health Science degree will demonstrate command of the following learning outcomes as evidenced by their participation in class, completion of class assignments, presentations, and projects. Graduates will effectively:

1. Communicate verbally and non-verbally. (Communication)
2. Demonstrate knowledge of the health sciences. (Knowledge Acquisition, Construction, and Application)
3. Apply mathematical principles in the biological and physical sciences. (Knowledge Acquisition, Construction, and Application)
4. Analyze strengths and weaknesses of alternative solutions, conclusions, or approaches to problems. (Evidence-Based Continuous Improvement)
5. Display behaviors consistent with Mercy's core values as servant leaders. (Servant Leadership)
6. Examine diverse populations. (Knowledge, Acquisition, Construction, and Application)

Tracks to the Bachelor of Science in Health Science

Track One

Track One is designed for students seeking to complete a rigorous bachelor's degree in the health sciences (125 credits) with the anticipation of working towards admission to a graduate health science program for further study.

Track Two

Track Two is designed for students who already hold an associate or bachelor's degree and wish to enhance their career by expanding their academic preparation or are currently enrolled in another academic major at Mercy Health Sciences University and wish to begin coursework towards this bachelor's degree at the same time (dual enrollment in both majors). A total of 108 credits will be earned under the Track Two curriculum plan with 17 credits awarded for the accepted associate degree when completed. Should completion of the first academic major at Mercy Health Sciences University not be possible, the student would have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Track Three

Track Three is intended for students who are eager to prepare for further graduate education and wish to obtain the Medical Laboratory Science (MLS) certificate *(See the MLS certificate section)*. One hundred (100) credits will be earned under the Track Three curriculum plan and an additional 25 credits will be awarded for the MLS certificate when the certificate is completed in the final year of the major. Acceptance into Track Three does not guarantee acceptance in the Mercy Health Sciences University MLS certificate. Students will follow the admissions procedures described in the Mercy Health Sciences University MLS certificate section. Students who are accepted into the Mercy Health Sciences University MLS certificate, and successfully complete

the year-long curriculum, will graduate with both a BSHS degree with a certificate in MLS. Students who are not accepted or do not complete the MLS certificate have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Track Four

Track Four is intended for students who wish to obtain the Bachelor of Science in Nursing through an accelerated curriculum and have a strong health science background. This track prepares students for a variety of graduate school health science options. Ninety-five credits will be earned under the Track Four curriculum plan and an additional 30 credits will be awarded for the BSN curriculum when the BSN is completed in the final year of the major. Acceptance into Track Four does not guarantee acceptance in the Mercy Health Sciences University Accelerated BSN program. Students will follow the admissions procedures described in the Mercy Health Sciences University Accelerated BSN section. Students who are accepted into the Mercy Health Sciences University Accelerated BSN, and successfully complete the year-long curriculum, will graduate with both a BSHS and BSN degree. Students who are not accepted or do not complete the Accelerated BSN Program have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Track Five

Track five is designed for students who wish to obtain the BSHS degree and further their education by obtaining a Doctorate degree. The curriculum consists of the BSHS degree for six semesters with the last year being the credits earned in the specified Doctorate programs listed. Acceptance into Track five does not guarantee acceptance in the Doctorate program at the Graduate Institution. Students will follow the admissions procedures described at the Graduate Institution. Students who are accepted into the Doctorate program and successfully complete the curriculum, will graduate with both a Bachelor of Science in Health Sciences from Mercy Health Sciences University and a Doctoral degree from the Graduate Institution. Students who are not accepted or do not complete the Doctoral program have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Track Six

Track Six is designed for students who wish to obtain the BSHS degree and further their education by obtaining a Master's degree. The curriculum consists of the BSHS degree for six semesters with the last year being the credits earned in the specified Master's program listed. Acceptance into Track Six does not guarantee acceptance in the Master's program at the Graduate Institution. Students will follow the admissions procedures described at the Graduate Institution. Students who are accepted into the Master's program and successfully complete the curriculum, will graduate with both a Bachelor of Science in Health Sciences from Mercy Health Sciences University and a Master degree from the Graduate Institution. Students who are not accepted or do not complete the Master 's program have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Admission Requirements

To be considered for admission to the Bachelor of Science in Health Science major, applicants must be admitted to Mercy Health Sciences University (See University Admissions section) and indicate Health Science as their first-choice major on the admission application. Applicants must be admitted to Mercy Health Sciences University (*See University Admissions section)*.

After Admission to the Major

1. Individualized meeting with Program Chair to determine track, curriculum plan and future goals.

2. Participation in BHS 300 – Practicum I and BHS 400 – Practicum II courses may require you to provide the following information to a preceptor/facility. If you have any concerns regarding providing this information, please let the Program Chair know by the end of the first semester in the major.

    - National Certified Background Check
    - Proof of immunizations including current TB
    - Health Insurance Portability and Accountability Act (HIPAA) Agreement Form
    - Proof of a flu shot, if required by practicum site.

Graduation Requirements BSHS Degree

Students must meet the following requirements to receive a Bachelor of Science in Health Science Degree:

- Completion of all required courses with a "C" or higher in all courses (not a "C-").
- Complete 30 credit hours at Mercy Health Sciences University, of which 15 credit hours of 300 and/or 400 level coursework must be taken.
- Successfully complete all practicum requirements.
- Completion of coursework and graduation requirements within six years following admission into the major.
- Satisfactorily complete the University Graduation Requirements.

Health Sciences Pathways

Overview

Health Sciences Pathways are structured academic options designed for students seeking admission into Mercy College's competitive and limited-capacity allied health and nursing programs. These pathways provide an entry point for students to enroll in a Health Sciences degree program while completing prerequisite coursework required for application to their intended professional program.

Students admitted under a Health Sciences Pathway are degree-seeking students who follow a unified academic plan that incorporates both Health Sciences core requirements and program-specific prerequisite coursework. This structure supports timely progression, informed decision-making, and degree completion regardless of admission outcomes to selective programs.

Admission to a Health Sciences Pathway does not guarantee acceptance into a professional program.

Available Pathways

Students select an intended pathway at the time of application. Available pathways include:

- Nursing, Bachelor of Science (BSN)
- Nursing, Accelerated Bachelor of Science (ABSN)
- Medical Laboratory Science (MLS)

Curriculum Structure

Each Health Sciences Pathway includes:

1. Health Sciences Core Requirements: Foundational coursework supporting healthcare knowledge, communication, and professional readiness.
2. Program Prerequisite Coursework: Courses required for application to the intended professional program. These courses simultaneously satisfy Health Sciences degree requirements where applicable.

Professional program-specific courses (i.e., courses taken only after formal program admission) are not included in the Health Sciences degree audit.

BSHS Curriculum – Track One

Track One is designed for students wanting to complete a bachelor's degree in the health sciences.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
BIO 302	Pathophysiology	3 credits
BIO 320	Genetics (w/Lab)	4 credits
BIO 360	Immunology	3 credits
BIO 410	Advanced Anatomy (w/Lab)	4 credits
BIO 450	Histology and Embryology (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHA 202	Pharmacology	3 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credit Hours: 65		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 105	Small Group Communications	1 credit
Total Credit Hours: 7		
Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken last semester)	3 credits
Total Credit Hours: 6		
Cultural Appreciation and Diversity Coursework		
	Cultural Appreciation and Diversity Elective	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 303	Abnormal Psychology	3 credits
SOC 102	Sociology	3 credits
	Social Sciences Elective (300/400 Level)	3 credits
Total Credits: 15		

Mathematical Sciences Coursework		
MAT 120	College Algebra or higher level of Math (such as calculus, but not a statistics course)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
Total Credit Hours: 6		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
Health Sciences Track One Coursework		
BIO 460	Cell and Molecular Biology	3 credits
BHS 400	Practicum II	2 credits
BHS 465	Health Assessment	3 credits
NTR 205	Nutrition	3 credits
STA 420	Research Methodologies	3 credits
STA 470	Advanced Research	3 credits
Total Credit Hours: 17		
Total BSHS Degree Credits: 125		

BSHS Curriculum – Track Two

Track Two is designed for candidates who already hold an associate or bachelor's degree and wish to enhance their career by expanding their academic preparation or are currently enrolled in another academic major at Mercy Health Sciences University.

Degree Requirement Coursework

Associate or Bachelor's degree (17 credits)

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
BIO 302	Pathophysiology	3 credits
BIO 320	Genetics (w/Lab)	4 credits
BIO 360	Immunology	3 credits
BIO 410	Advanced Anatomy (w/Lab)	4 credits
BIO 450	Histology and Embryology (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHA 202	Pharmacology	3 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits

Total Credits: 65		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 105	Small Group Communications	1 credit
Total Credit Hours: 7		
Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken last semester)	3 credits
Total Credit Hours: 6		
Cultural Appreciation and Diversity Coursework		
	Cultural Appreciation and Diversity Elective	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 303	Abnormal Psychology	3 credits
SOC 102	Sociology	3 credits
	Social Sciences Elective (300/400 Level)	3 credits
Total Credit Hours: 15		
Mathematical Sciences Coursework		
MAT 120	College Algebra or higher level of Math (such as calculus, but not a statistics course)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
Total Credit Hours: 6		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
	Elective Courses	17 credits
Total BSHS Degree Credits: 125		

BSHS Curriculum – Track Three

Track Three is designed for students who wish to obtain the BSHS degree with an emphasis in Medical Laboratory Science.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits

BIO 203	Microbiology (w/Lab)	4 credits
BIO 302	Pathophysiology	3 credits
BIO 320	Genetics (w/Lab)	4 credits
BIO 360	Immunology	3 credits
BIO 400	Pathogenic Microbiology (w/Lab)	3 credits
BIO 460	Cell and Molecular Biology	3 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 60		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 105	Small Group Communications	1 credit
Total Credit Hours: 7		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken last semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
	Cultural Appreciation and Diversity Elective	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
SOC 102	Sociology	3 credits
Total Credit Hours: 6		
Mathematical Sciences Coursework		
MAT 120	College Algebra or higher level of Math (such as calculus, but not a statistics course)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 9		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
Management Coursework (one of the following)		
HCA 301	Healthcare Delivery in the United States	3 credits
HCA 413	Hospital: Organization and Administration	3 credits
Total Credit Hours: 3		
Medical Laboratory Science Requirement Coursework		
	MLS Certificate	25 credits
Total BSHS Degree Credits: 125		

BSHS Curriculum – Track Four

Track Four is designed for students who wish to obtain the BSHS degree with the last year being the Accelerated BSN program

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
BIO 302	Pathophysiology	3 credits
BIO 320	Genetics (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
NTR 205	Nutrition	3 credits
PHA 202	Pharmacology	3 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 57		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 105	Small Group Communications	1 credit
Total Credit Hours: 7		

Humanities Coursework		
PHI 301	Critical Thinking (must be taken last semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
	Cultural Appreciation and Diversity Elective	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 303	Abnormal Psychology	3 credits
SOC 102	Sociology	3 credits
Total Credit Hours: 9		
Mathematical Sciences Coursework		
MAT 120	College Algebra or higher level of Math (such as calculus, but not a statistics course)	3 credits

STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 9		
Health Sciences Coursework		
MED 101	Medical Terminology	1 credit
Total Credit Hours: 1		
Accelerated BSN Coursework		
Accelerated BSN courses		52 credits
Total BSHS Degree Credits: 125		

BSHS Curriculum – Track Five

Track Five is designed for students who wish to obtain the BSHS degree and further their education by obtaining a Doctoral degree.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

1. Doctor of Pharmacy program at Drake University (Des Moines, IA).

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 321	Organic Chemistry II (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 48		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 110	Fundamentals of Public Speaking	3 credits
Total Credit Hours: 9		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken 6th semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
SOC 102	Sociology	3 credits
Total Credit Hours: 3		

Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 303	Abnormal Psychology	3 credits
Total Credit Hours: 9		
Mathematical Sciences Coursework		
MAT 225	Calculus for Health Science	4 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 10		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
Mercy Health Sciences University Coursework		
Total Credit Hours		91 credits
Drake University Coursework		
Total Credit Hours		34 credits
Total BSHS Degree Credits: 125 (also earned minor in Chemistry)		

2. Doctor of Pharmacy program at the University of St. Joseph (Hartford, CT).

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 321	Organic Chemistry II (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 48		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 110	Fundamentals of Public Speaking	3 credits
Total Credit Hours: 9		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken 6th semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		

SOC 102	Sociology	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
Total Credit Hours: 6		
Mathematical Sciences Coursework		
MAT 225	Calculus for Health Science	4 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 10		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
HCA 303	Healthcare Economics	3 credits
Total Credit Hours: 6		
Mercy Health Sciences University Coursework		
Total Credit Hours		91 credits
St. Joseph University Coursework		
Total Credit Hours		34 credits
Total BSHS Degree Credits: 125 (also earned minor in Chemistry)		

3. Doctor of Occupational Therapy program at Drake University (Des Moines, IA).

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 321	Organic Chemistry II (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 48		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 110	Fundamentals of Public Speaking	3 credits
Total Credit Hours: 9		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken 6th semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
SOC 102	Sociology	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
PSY 303	Abnormal Psychology	3 credits
	Social Sciences Elective (300/400 Level)	3 credits
Total Credit Hours: 12		
Mathematical Sciences Coursework		
MAT 120	College Algebra or higher level of Math (such as calculus, but not a statistics course)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 9		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
Mercy Health Sciences University Coursework		
Total Credit Hours		93 credits
Drake University Coursework		
Total Credit Hours		32 credits
Total BSHS Degree Credits: 125 (also earned minor in Chemistry)		

BSHS Curriculum – Track Six

Track Six is designed for students who wish to obtain the BSHS degree and further their education by obtaining a Master's degree. The curriculum consists of the BSHS degree for six semesters with the last year being the credits earned in the Master's program.

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

1. Master of Science in Athletic Training at Drake University (Des Moines, IA)

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits

BIO 185	Human Physiology (w/Lab)	4 credits
BIO 410	Advanced Anatomy (w/Lab)	4 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
NTR 205	Nutrition	3 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 47		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 110	Fundamentals of Public Speaking	3 credits
Total Credit Hours: 9		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken 6th semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
SOC 102	Sociology	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
Total Credit Hours: 6		
Mathematical Sciences Coursework		
MAT 120	College Algebra (or higher-level Math course but not statistics)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
Total Credit Hours: 9		
Health Sciences Coursework		
BHS 300	Practicum I	2 credits
BSH 400	Practicum II	2 credits
BHS 465	Health Assessment	3 credits
MED 101	Medical Terminology	1 credit
PTA 162	Therapeutic Exercise	4 credits
Total Credit Hours: 12		
Mercy Health Sciences University Coursework		
Total Credit Hours		95 credits
Drake University Coursework		
Total Credit Hours		30 credits
Total BSHS Degree Credits: 125		

2. Master of Science in Biomedical Science from Des Moines University (Des Moines, IA).

Natural Sciences Coursework		
BIO 101	General Biology I (w/Lab)	4 credits
BIO 102	General Biology II (w/Lab)	4 credits
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 203	Microbiology (w/Lab)	4 credits
BIO 320	Genetics (w/Lab)	4 credits
BIO 360	Immunology	3 credits
BIO 400	Pathogenic Microbiology	3 credits
BIO 460	Cell and Molecular Biology	3 credits
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry (w/Lab)	4 credits
CHE 321	Organic Chemistry II (w/Lab)	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
PHY 101	Physics I (w/Lab)	4 credits
PHY 102	Physics II (w/Lab)	4 credits
Total Credits: 61		
Communication Coursework		
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
SPE 110	Fundamentals of Public Speaking	3 credits
Total Credit Hours: 9		

Humanities Coursework		
	Humanities Elective	3 credits
PHI 301	Critical Thinking (must be taken 6th semester)	3 credits
Total Credits: 6		
Cultural Appreciation and Diversity Coursework		
SOC 102	Sociology	3 credits
Total Credit Hours: 3		
Servant Leadership Coursework		
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 3		
Social Sciences Coursework		
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
Total Credit Hours: 6		
Mathematical Sciences Coursework		
MAT 120	University Algebra (or higher-level Math course but not statistics)	3 credits
STA 330	Biostatistics (300 level or higher statistics course)	3 credits
STA 420	Research Methodologies	3 credits
STA 470	Advanced Research	
Total Credit Hours: 12		
Health Sciences Coursework		
BHS 300	Practicum I.	2 credits
MED 101	Medical Terminology	1 credit
Total Credit Hours: 3		
Mercy Health Sciences University Coursework		
Total Credit Hours		103 credits

Des Moines University Coursework	
Total Credit Hours	22 credits
Total BSHS Degree Credits: 125 (earned minors in Chemistry and Biomedical Research)	

Healthcare Administration

Purpose

The Bachelor of Science in Healthcare Administration (BSHCA) degree is designed to educate undergraduates as healthcare leaders with a strong theoretical foundation in the principles of management, technology, legal and ethical issues, finance, economics, and human relations. The curriculum is designed to reinforce critical and creative thinking skills that are needed to plan, finance, coordinate, and evaluate health services with quality and proficiency in today's highly technological and rapidly changing world of healthcare administration. Graduates will develop the leadership skills necessary to balance healthcare issues with values that demonstrate caring, ethical and legal responsibility and intuitive responsibility to the needs of those who are served.

Outcomes

1. Apply the knowledge required to be a leader in today's complex healthcare administration environment. (Knowledge Acquisition, Construction, and Application)
2. Exhibit critical thinking skills when determining possible solutions, a healthcare administrator uses to resolve healthcare issues. (Knowledge Acquisition, Construction, and Application)
3. Explain importancethe importance of life-long learning in relation to being a leader/administrator in today's complex healthcare environment. (Knowledge Acquisition, Construction, and Application)
4. Identify the challenges of healthcare leadership/administration within a legal and ethical framework. (Knowledge Acquisition, Construction, and Application)
5. Use a variety of appropriate communication skills to collaborate with others to achieve common goals as leaders/administrators in healthcare organizations. (Communication)
6. With a servant's heart, exhibit personal and social accountability as a means to address community, national, and global needs as a leader/administrator in today's complex healthcare environment. (Servant Leadership)
7. Utilize research and statistical data for problem solving and decision making leading to continuous improvement in the leadership/administration of healthcare organizations. (Evidence-Based Continuous Improvement)
8. Articulate innovative strategies by which administrators lead a healthcare organization with consideration for cost, quality, and access. (Evidence-Based Continuous Improvement)

Admission Requirements

For admission to the Bachelor of Science in Healthcare Administration (HCA) major, applicants must be admitted to Mercy Health Sciences University (see Admissions section) and indicate Healthcare Administration as their first-choice major on the admission application.

After Admission to the Major

1. Schedule an individualized meeting with the Program Chair to determine curriculum plan and future goals.
2. Apply for financial aid.
3. Register for first semester of classes.
4. Provide any necessary documentation for required practicum course – HCA 420 may require you to provide the following information to a preceptor/facility. If you have any

concerns about providing this information, please let the Program Chair know by the end of the first semester in the major:

- National Certified Background Check
- Proof of immunizations including current TB
- Health Insurance Portability and Accountability Act (HIPAA) Agreement Form
- Proof of a flu shot, if required by practicum site

Graduation Requirements BSHCA Degree

Student must meet the following requirements to receive a Bachelor of Science in Healthcare Administration Degree:

- Completion of all required courses with a "C" or higher in all courses (not a "C-").
- Complete 30 credit hours at Mercy Health Sciences University; of which, 15 credits must be at the 300/400 level
- Complete all coursework within six years of admission into the program
- Successfully complete all practicum requirements
- Satisfactorily complete the University Graduation Requirements
- Complete the Healthcare Administration portfolio.

Healthcare Administration Minor (see Academic Minor Section)

BSHCA Curriculum

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

General Core Curriculum: 41 Credits		
Some Courses below may fulfil general education requirements		
Required Courses for the BSHCA Major		
HCA\PBH 301	Healthcare Delivery in the United States	3 credits
HCA\PBH 303	Healthcare Economics	3 credits
HCA 304	Human resources Management in Healthcare	3 credits
HCA 305	Principles of Management in Healthcare	3 credits
SVL 285	Servant Leadership	3 credits
STA 330	Biostatistics	3 credits
HCA 320	Marketing Strategies in Healthcare	3 credits
HCA 324	Information Resources in Healthcare	3 credits
STA 420	Research Methodologies	3 credits
HCA 404	Legal\Ethical Aspects of Healthcare	3 credits
HCA 405	Leadership Strategies in Healthcare	3 credits
HCA 415	Healthcare Financial Management	3 credits
HCA 420	Practicum I	2 credits
HCA 495	Capstone	1 credit
Choose 3 of the following 5 courses below:		9 credits
HCA 412	Long-term Care: Organization and Administration	3 credits
HCA 413	Hospitals: Organization and Administration	3 credits
HCA 414	Ambulatory Care Services: Organization and Administration	3 credits
HCA 416	Data Interpretation and Project Management	3 credits
HCA 417	Self-Awareness and the Effective Leader	3 credits
	Total Course Program Credit hrs.:	**45 credits**
	Electives	**34 credits**
Total HCA Degree Credits		**120 credits**

Course sequence could vary depending on student enrollment status: Students should meet with the BSHCA Program Chair to develop a curriculum plan for completing the degree.

BSHCA Minor

Healthcare Administration Minor Coursework must take HCA 301 and then 15 additional credits		
HCA 301	Healthcare Delivery in the United States – A Consumer Perspective	3 credits
Select 15 credits from the following courses:		
HCA 303	Healthcare Economics	3 credits
HCA 304	Human Resources Management in Healthcare	3 credits
HCA 305	Principles of Management in Healthcare	3 credits
HCA 320	Marketing Strategies in Healthcare	3 credits
HCA 324	Information Resources in Healthcare	3 credits
HCA 404	Legal/Ethical Aspects of Healthcare	3 credits
HCA 405	Leadership Strategies in Healthcare	3 credits
HCA 415	Healthcare Financial Management	3 credits
HCA 412	Long Term Care: Organization and Administration	3 credits
HCA 413	Hospitals: Organization and Administration	3 credits
HCA 414	Ambulatory Care Services: Organization and Administration	3 credits
HCA 416	Data Interpretation and Project Management	3 credits
HCA 417	Self-Awareness and the Effective Leader	3 credits
Total Credit Hours: 18		

Medical Assisting

Purpose

The Medical Assisting Program is dedicated to educating students in the profession of medical assisting through an integrated program of studies and professional education. Guided by the mission of Mercy Health Sciences University, and in compliance with the Commission on Accreditation of Allied Health Education Program (CAAHEP) standards for medical assisting programs, the primary purpose is to facilitate the personal and professional development of students. The Medical Assisting Program at Mercy Health Sciences University provides students with the academic and clinical experiences needed to become caring, ethical, and competent healthcare providers.

Medical assistants are multi-skilled healthcare professionals specifically educated to work primarily in ambulatory care settings performing administrative and clinical duties. The practice of medical assisting directly influences the public's health and well-being and requires mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession. Medical assistants work under the supervision of licensed physicians and physician assistants.

Learning Goals

- To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) domains utilizing the resource of the Standards and Guidelines for Medical Assisting Educational Programs.
- To provide students with the knowledge to display professionalism, therapeutic communication, and patient education.
- To provide students with the necessary knowledge to be an integral part of a healthcare team by assisting providers and promoting positive patient relations.

Outcomes

Upon completion of the Medical Assisting Certificate, graduates will:

1. Perform entry-level medical assisting administrative and clinical skills.
2. Apply professionalism and therapeutic communication appropriate to the medical clinic.
3. Identify legal and ethical conduct suitable to the medical clinic.
4. Effectively participate as an integral part of a healthcare team by assisting providers and promoting positive patient relations.
5. Display behaviors consistent with the core values of Mercy.

Upon completion of the Medical Assisting major, graduates will demonstrate the objectives of the certificate and will:

- Demonstrate the ability to communicate effectively.
- Articulate personal values in relation to ethical standards.
- Display leadership through service-oriented activities.
- Combine knowledge from arts and sciences and medical assisting with critical thinking skills to function effectively as a medical assistant.

Medical Assisting Certificate

The Medical Assisting (MA) Certificate curriculum includes four quarters of classroom instruction, competency demonstration in skills lab, and clinical experience in an ambulatory care setting.

Associate of Science in Medical Assisting Degree

An Associate of Science in Medical Assisting (ASMA) Degree may be earned by taking the 60 credit hours specified in the ASMA curriculum.

Admission Requirements for the Associate of Science Degree and Certificate

Following acceptance into Mercy Health Sciences University and the Medical Assisting Program, applicants are required to meet with the Program Chair for an informational and advising session prior to starting the program.

Articulation of Transfer Credit to Medical Assisting

Applicants meeting admissions criteria who have completed medical assisting courses at another institution may apply for transfer credit. The courses must have been completed at a CAAHEP accredited Medical Assisting program no more than two years prior to the semester in which the student enrolls in the medical assisting program at Mercy Health Sciences University. The following will be considered in the approval of transfer credit:

- Similarity of course content.
- Placement exams will be administered by the Program Chair to verify knowledge and clinical skills prior to accepting transfer credit.
- Evaluation of clinical competency by Mercy Health Sciences University faculty.
- Availability of space in the appropriate medical assisting course.
- Transfer credits applied must have a grade of "C" or higher (not "C-").

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University Medical Assisting students. These abilities are based on the job requirements for medical assistants at Mercy Clinics, Inc., the site of most clinical experiences in Medical Assisting. Applicants must review the following clinical standards to determine their ability and compatibility with the physical requirements of medical assistants.

Physical Activity Requirements

Constant

Reaching – Extending hand(s) and arm(s) in any direction.
Walking – Moving about on foot to accomplish tasks, particularly for long distances.
Talking – Expressing or exchanging ideas by means of the spoken word. Those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
Hearing – Perceiving the nature of sounds at normal range. Ability to receive detailed information through oral communication, and to make fine discrimination in sound, such as when making fine adjustments on machined parts (i.e. lab machines).

Frequent

Stooping – Bending body downward and forward by bending spine at the waist.
Crouching – Bending the body downward and forward by bending leg and spine.
Standing – Particularly for sustained periods of time.
Pushing – Using upper extremities to press against something with steady force in order to thrust forward, downward, or outward, i.e., adjusting x-ray equipment.
Pulling – Using upper extremities to exert force in order to draw, drag, haul, or tug objects in a sustained motion.

Lifting – Raising objects from a lower to a higher position or moving objects horizontally from position-to-position.
Fingering – Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand or arm as in handling i.e., operating lab machines.
Grasping – Applying pressure to an object with the fingers and palm.
Feeling – Perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips, i.e., phlebotomy.
Repetitive Motions – Substantial movements (motions) of wrists, hands, and/or fingers, i.e., data entry.

Occasional

Kneeling – Bending legs at knee to come to a rest or knee or knees, i.e., when performing venipuncture.

Physical Demand Requirements

Medium work – Exerting up to 50 pounds of force occasionally and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Visual Acuity

During clinical assignments, students are required to read pertinent printed materials and distinguish colors, use inspection during patient assessment, accurately read measurements on patient related equipment (i.e. thermometers, BP gauges, glucometers, IV pumps, computer monitor displays), accurately use sharps and other equipment to perform patient assessments and treatment, phlebotomy and x-ray procedures, as well as use various lab machines, computer terminals, and prepare and analyze data and extensive reading.

Intellectual/Emotional Requirements

Students must be able to:

- Perform a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.
- Situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint.
- Influence people in their opinions, attitudes, or judgments about ideas or things.
- Make generalizations, evaluations, or decisions based on sensory or judgmental criteria.
- Make generalizations, evaluations, or decisions based on measurable or verifiable criteria.
- Deal with people beyond giving and receiving instructions.
- Performing under stress when confronted with emergency, critical, unusual, or dangerous situations; or situations in which working speed and sustained attention are make-or-break aspects of the job.
- Accept responsibility for the direction, control, or planning of an activity.
- Maintain both a high standard of courtesy and cooperation in dealing with colleagues, patients, visitors, and satisfactory job performance despite the stress of a medical work environment.

Tools/Equipment

- Lab Equipment
- Calculator
- Printer
- Phone/Fax
- Therapeutic Equipment
- X-Ray Equipment
- Computer
- Photocopier
- Diagnostic

Clinical Conditions

- Students in this clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials, therefore, are included in OSHA Exposure Control Plan with all its specifications for preventing contact with the above materials.
- Students in this clinical setting have also been identified as having the likelihood of exposure to sharps, glass containers, and hazardous chemicals.

Failed Course Policy for the Medical Assisting Program

Regarding progression in the program:

1. In order to be promoted to the next semester, students must successfully complete all classes with a grade of "C" or higher (not "C-").
2. A student who fails three or more courses in the major (regardless of retakes) will be dismissed from the MA Program and must sit out for at least one semester before reapplying to any clinical major.

Graduation Requirements Medical Assisting Certificate

Student must meet the following requirements to receive a Medical Assisting Certificate:

- Successfully complete all arts and sciences and professional education courses in the curriculum plan with a grade of "C" or higher (not "C-").
- Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
- Complete the University residency requirement of 15 credit hours.
- Successfully complete all skill competency exams.

Graduation Requirements ASMA Degree

Student must meet the following requirements to receive an Associate of Science in Medical Assisting degree:

- Successfully complete all arts and sciences and core curriculum requirements plan with a grade of "C" or higher (not "C-").
- Complete the University residency requirement of 15 credit hours at the associate level.
- Successfully complete all skill competency exams.
    - Satisfactorily complete the University Graduation Requirements.

Medical Assisting Certificate Curriculum

Medical Assisting Certificate

*Check course descriptions for appropriate prerequisite and co-requisite course associations.

Required Courses for the Certificate		Credits
MA 101	Medical Assisting Administrative Procedures	4 credits
MA 102	Medical Assisting Clinical Procedures I	4 credits
MA 106	Anatomy and Physiology	4 credits
MA 108	Diseases of the Human Body	3 credits
MA 122	Medical Assisting Clinical Procedures II	4 credits
MA 201	Medical Assisting Professional Components*	2 credits
MA 205	Medical Assisting Practicum	4 credits
Total Certificate Credits: 25		

* Servant Leadership Workshop embedded within MA courses

Accelerated Course Sequence ~~Available January 2026~~		
MA Semester I 8-week term* and 7-week term		**Credits**
MA 101	Medical Assisting Administrative Procedures I*	4 credits
MA 102	Medical Assisting Clinical Procedures I*	4 credits
MA 106	Anatomy and Physiology	4 credits
MA 122	Medical Assisting Clinical Procedures II	4 credits
Total Credit Hours: 16		
MA Semester II 8-week term*,7-week term and 15-week semester		
MA 108	Diseases of the Human Body*	3 credits
MA 203	Medical Assisting Practicum I*	2 credits
MA 205	Medical Assisting Practicum	4credits
Total Credit Hours: 9		
Total MA Certificate Credits: 25		

Recommended Course Sequence		
MA Semester I 8-week term* and 7-week term		**Credits**
MA 101	Medical Assisting Administrative Procedures I*	4 credits
MA 106	Anatomy and Physiology	4 credits
Total Credit Hours: 8		
MA Semester II 8-week term* and 7-week term		
MA 102	Medical Assisting Clinical Procedures I*	4 credits
MA 122	Medical Assisting Clinical Procedures II	4 credits
Total Credit Hours: 8		
MA Semester III 8-week term*, 7-week term and 15-week semester		
MA 108	Diseases of the Human Body*	3 credits
MA 203	Medical Assisting Practicum I*	2 credits
MA 205	Medical Assisting Practicum	4 credits
Total Credit Hours: 9		
Total MA Certificate Credits: 25		

ASMA Degree Curriculum

Some courses listed below may fulfill general education core requirements. General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.
*Check course descriptions for appropriate prerequisite and co-requisite course associations.

Required Courses for the Major		Credits
MAT ###	Math Elective (100 level or higher)	3 credits
	Natural Science Elective (100 level or higher)	4 credits
	Humanities Elective (100 level or higher)	3 credits
PSY/SOC ###	Social Science Elective (General Psychology recommended)	3 credits
	Core Electives (100 level or higher)	12 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
MA 101	Medical Assisting Administrative Procedures	4 credits
MA 102	Medical Assisting Clinical Procedures I	4 credits
MA 106	Anatomy and Physiology	4 credits

MA 108	Diseases of the Human Body	3 credits
MA 122	Medical Assisting Clinical Procedures II	4 credits
MA 201	Medical Assisting Professional Components*	2 credits
MA 205	Medical Assisting Practicum	4 credits
SPE 105	Small Group Communication	1 credit
SVL 285	Servant Leadership	3 credits
Total ASMA Degree Credits: 54		

Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration or Bachelor of Science in Health Science at Mercy Health Sciences University.

Medical Laboratory Science

Purpose

The Medical Laboratory Science (MLS) Program prepares graduates for service and leadership in the healthcare community by integrating its core values of knowledge, reverence, integrity, compassion, and excellence with a professional medical laboratory science education.

The MLS Program provides students with the educational foundation required to become medical laboratory scientists through an intensive curriculum. Guided by the mission of Mercy Health Sciences University, and in compliance with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) Standards for Accredited Programs including the Unique Standards for the Medical Laboratory Scientist, the primary purpose is to facilitate the personal and professional development of students. The MLS Program provides students with the academic and clinical experiences needed to become caring, ethical, and competent medical laboratory scientists who will work independently and in teams to perform laboratory testing, correlate, evaluate, develop, and assure validity of laboratory information and collaborate with other health professions in the diagnosis and treatment of patients.

Goals

- Prepare individuals to become laboratory professionals who perform wide ranging laboratory analysis accurately, timely, and efficiently.
- Develop professionals who think logically, creatively, critically, responsively, and exercise good judgment.
- Prepare individuals to become leaders in medical laboratory science and the healthcare community.

Outcomes

Upon completion of the Medical Laboratory Science Program, the graduate will:

1. Accurately perform the full range of clinical laboratory tests in Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion Medicine, Microbiology, Urine and Body Fluid Analysis, and other emerging diagnostics.
2. Interpret laboratory results.
3. Correlate laboratory results to clinical conditions.
4. Demonstrate critical thinking when solving problems in all phases of laboratory processing and testing.
5. Apply principles of quality assurance/performance improvement to laboratory testing.
6. Demonstrate professional conduct in all activities.
7. Maintain continued professional development.
8. Apply safety standards and governmental regulations to medical laboratory science.
9. Communicate appropriately and effectively with patients, the public, and members of the healthcare team.
10. Apply principles of administration and supervision to manage laboratory operations.
11. Utilize educational methodologies to educate users and providers of laboratory services.
12. Apply principles and practices of clinical study design, implementation, and dissemination of results to laboratory testing.

Admission Requirements

To be considered for admission to the Medical Laboratory Science Program applicants must be admitted to Mercy Health Sciences University (*see Admissions section*) and meet criteria listed below. Admission to the University does not guarantee admission to the program.

1. Achieve a minimum cumulative GPA of 2.5 on a 4.0 scale in all University-level coursework
2. Achieve a minimum cumulative GPA of 2.5 on a 4.0 scale in all University-level coursework in science, including Biology, Microbiology, Zoology, Chemistry, Physics, Mathematics, Statistics and related courses.
3. Complete before enrollment:
    - Minimum sixteen (16) semester hours of Chemistry, including Biochemistry and/or Organic Chemistry that are part of a science major curriculum. Accompanying laboratory experiences must be included as part of the courses or as separate courses.
    - Minimum sixteen (16) semester hours of Biology, including Immunology and Microbiology that are part of a science major curriculum. Accompanying laboratory experiences must be included as part of the course or as separate laboratory courses except for Immunology.
    - Minimum three (3) semester hours of University level mathematics e.g. College algebra or above.
    - Note: coursework taken to meet the biology and chemistry requirements completed seven or more years before application may require updating. This is determined by the Program Chair.
4. Earn a grade of "C" (not "C-") or higher in all required courses.
5. Qualified students may be from an affiliated or non-affiliated institution.
    - The following institutions are affiliated with the Mercy Health Sciences University MLS Program:
        - Buena Vista University
        - Drake University
        - Luther College
        - Minnesota State University – Mankato
        - Mount Mercy Health Sciences University
        - North Dakota State University
        - Northwest Missouri State University
        - University of Iowa
        - University of South Dakota
        - Wartburg College
        - Winona State University
    - Students from affiliated institutions who have completed three years or equivalent of undergraduate work are eligible to complete the fourth year in the Mercy Health Sciences University MLS Program. All coursework, other than the medical laboratory science courses, required by the academic institution toward a bachelor's degree, must be completed by the student prior to beginning the MLS Program.
    - Students from affiliated institutions will receive a MLS Certificate from Mercy Health Sciences University upon completion of the MLS Program. Bachelor's degrees are conferred by the affiliated institution
    - Students from non-affiliated institutions must have completed a bachelor's degree at an accredited institution and must have completed all science prerequisites to meet eligibility requirements.
    - Students will receive a MLS Certificate from Mercy Health Sciences University upon completion of the MLS Program.
6. Submit the required Mercy Health Sciences University application materials to the admissions office including:
    - Mercy Health Sciences University Application
    - Official University transcripts from all institutions attended

7. Submit the Medical Laboratory Science application materials including:
    - MLS Program Application (five parts in portal)
    - Three references
        - The applicant will provide evaluators with a link to the online reference form. After completing the References and Essay section of the MLS Program application, the applicant will receive the link to the online reference form from the Program Chair. It is also available on the University website.
        - Evaluators will complete and submit the online reference form.
        - Two of the references must be from professors, laboratory instructors, or teaching assistants, and one may be from an employer or an additional professor, lab instructor, or teaching assistant.
        - References from relatives are not acceptable.
8. Optional: Attend the MLS Program Session
9. All applicants meeting the minimum admission requirements by the priority application deadline are invited to attend on the designated date after all required documents have been received.
    - Session includes:
        - Information session providing MLS Program details
        - Tour of laboratory where clinical experiences occur
        - Tour of campus
        - Opportunity to meet MLS faculty and ask questions
10. Applicants may consider taking the following courses in preparation for the MLS Program. The courses are not required and not taking them will not exclude the student from consideration for the MLS Program.
    - Parasitology
    - Genetics
    - Physiology
    - Hematology
    - Immunohematology
    - Quantitative Analysis
    - Analytical Chemistry
    - Statistics
    - Computer Science
    - Management and Human Relations
    - Instrumentation

Selection Process

All complete applications meeting the minimum requirements are reviewed by the selection committee which considers the following:

- Cumulative and Science GPA
- Types and difficulty of courses taken
- Evidence of well-rounded education
- Recommended courses taken that are not required
- Work experience
- Volunteer and extracurricular activities
- References
- Essay

Application Deadlines

For priority consideration, all required Mercy Health Sciences University and MLS Program application items must be received by October 15. Admission will be announced by December 1. Applications will be accepted after October 15th if open positions remain after priority consideration is completed.

Program Start	Application & Transcript Deadline
Fall Semester	October 15

Admission to the MLS Program is on a competitive basis. Meeting the minimum admission criteria does not guarantee admission into the MLS Program. Admission to Mercy Health Sciences University does not guarantee admission to the MLS Program.

The Medical Laboratory Science Program does not offer advance placement.

Failed Course Policy for MLS Program

Regarding progression in the program:

1. In order to be promoted to the next semester, students must successfully complete all clinical and didactic courses with a grade of "C" or higher (not "C-").
2. A student who fails three or more courses in the major (regardless of retakes) will be dismissed from the MLS Program and must sit out for at least one semester before reapplying to any clinical major.

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University MLS students. These abilities are based on job requirements for medical laboratory scientists at MercyOne Des Moines Medical Center, the site of most clinical experiences in the MLS Program. Applicants must review the following clinical standards to determine their ability and compatibility with the requirements of medical laboratory scientists.

Physical Activity Requirements

Frequent

Standing: While performing test analysis.
Reaching: While performing test analysis.
Fingering: While entering data into the computer.
Grasping: While handling equipment and specimens.
Talking: While communicating with co-workers, patients and/or staff to instruct or relay information.
Hearing: To receive information.
Lifting: Up to 10 pounds to put away/retrieve books, manuals, and trays.

Occasional

Pushing and Pulling: While stocking supplies, opening drawers, closing drawers and delivering specimens.
Lifting: Up to 50 pounds while handling supplies.
Climbing: While storing and retrieving supplies and ascending or descending stairs.
Stooping: With up to 20 pounds to put away supplies and change printer paper.

Physical Demand Requirements

Exerts up to 50 pounds of force occasionally, up to 30 pounds of force frequently, and 10 of force constantly moving objects.

Visual Acuity Requirements

Works with computer terminals, instrumentation with small moving parts, read labels and work lists, aliquots specimens and reagents, reads instructions, records data; needs to be able to distinguish between colors.

Intellectual and Emotional Requirements

- Ability to maintain satisfactory job performance and high standards of both courtesy and cooperation in dealing with co-workers, patients and visitors despite the stress of a hospital work environment.
- Ability to accept responsibility for the direction, control, or planning of an activity.
- Ability to interpret feelings, ideas, or facts in terms of personal viewpoint.
- Ability to influence people in their opinions, attitudes, or judgments about ideas or things.
- Ability to make generalizations, evaluations, or decisions based on sensory or judgmental criteria.
- Ability to make generalizations, evaluations, or decisions based on measurable or verifiable criteria.
- Ability to deal with people beyond giving and receiving instructions.
- Ability to perform under stress when confronted with emergency, critical, unusual, or dangerous situations, or situations in which working speed and sustained attention are make-or-break aspects of the job.
- Ability to manage situations requiring precise attainment of set limits, tolerances, or standards.
- Ability to perform a variety of duties, often changing from one task to another, without loss of efficiency or composure.

Tools/Equipment

- Automated analyzers
- Centrifuges
- Microscopes
- Pipetting devices
- Flow cytometers
- Laminar flow hoods
- Office equipment

Clinical Conditions

- Students are subject to chemical hazards.
- Students in the clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials, therefore, are included in the OSHA Exposure Control Plan with its specification for preventing contact with the above materials.
- Students are exposed to sharps.
- Students are subject to inside environmental conditions.

Graduation Requirements for the Certificate

- Successfully complete all coursework in both didactic and clinical portions of the program with a grade of "C" or higher (not "C-").
- Satisfactorily complete the applicable University graduation requirements (see Academic Policies and Procedures).

The granting of the certificate is not contingent upon the student passing any type of external certification or licensure examination.

Graduates are Encouraged to Apply and to Sit for the National Certification Exam

The Medical Laboratory Scientist (MLS) exam is offered by the American Society for Clinical Pathology Board of Certification (ASCP-BOC).

The Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd, Suite 720, Rosemont, IL 60018-5119: phone: 773-714-8880; email: info@naacls.org; website: www.naacls.org.

MLS Program Curriculum

Required Courses for the Certificate		Credits
MLS 411	Clinical Immunology Didactic	1 credit
MLS 413	Clinical Immunohematology Didactic I	1 credit
MLS 414	Urinalysis, Body Fluids, and Microscopy Didactic	1 credit
MLS 415	Clinical Chemistry Didactic I	2 credits
MLS 417	Clinical Hematology Didactic I	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 422	Clinical Microbiology Didactic I	2 credits
MLS 432	Clinical Immunohematology and Immunology Rotation I	2 credits
MLS 433	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation I	2 credits
MLS 435	Clinical Microbiology Rotation I	2 credits
MLS 436	Clinical Chemistry Rotation I	2 credits
MLS 443	Clinical Immunohematology Didactic II	1 credit
MLS 445	Clinical Chemistry Didactic II	2 credits
MLS 447	Clinical Hematology Didactic II	2 credits
MLS 448	Management and Education Methods II	1 credit
MLS 452	Clinical Microbiology Didactic II	2 credits
MLS 462	Clinical Immunohematology and Immunology Rotation II	2 credits
MLS 463	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II	2 credits
MLS 465	Clinical Microbiology Rotation II	2 credits
MLS 466	Clinical Chemistry Rotation II	2 credits
MLS 472	Clinical Microbiology Didactic III	2 credits
MLS 477	Clinical Hematology Didactic III	2 credits
MLS 478	Management and Education Methods III	3 credits
Total MLS Certificate Credits: 40		

Recommended Course Sequence		
Semester I (Fall)		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 413	Clinical Immunohematology Didactic I	1 credit
MLS 415	Clinical Chemistry Didactic I	2 credits
MLS 417	Clinical Hematology Didactic I	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 422	Clinical Microbiology Didactic I	2 credits
Three of the following:		
MLS 432	Clinical Immunohematology and Immunology Rotation I	2 credits
MLS 433	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation I	2 credits
MLS 435	Clinical Microbiology Rotation I	2 credits
MLS 436	Clinical Chemistry Rotation I	2 credits
Total Credit Hours: 14		

Semester II (Spring)		
MLS 432, 433, 435 or MLS 436 (course not taken in Fall)		2 credits
MLS 443	Clinical Immunohematology Didactic II	1 credit
MLS 445	Clinical Chemistry Didactic II	2 credits
MLS 447	Clinical Hematology Didactic II	2 credits
MLS 448	Management and Education Methods II	1 credit
MLS 452	Clinical Microbiology Didactic II	2 credits
Two of the following:		
MLS 462	Clinical Immunohematology and Immunology Rotation II	2 credits
MLS 463	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II	2 credits
MLS 465	Clinical Microbiology Rotation II	2 credits
MLS 466	Clinical Chemistry Rotation II	2 credits
Total Credit Hours: 14		
Semester III (Summer)		
MLS 414	Urinalysis, Body Fluids and Microscopy Didactic	1 credit
MLS 472	Clinical Microbiology Didactic III	2 credits
MLS 477	Clinical Hematology Didactic III	2 credits
MLS 478	Management and Education Methods III	3 credits
Two of the following not taken in Spring:		
MLS 462	Clinical Immunohematology and Immunology Rotation II	2 credits
MLS 463	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II	2 credits
MLS 465	Clinical Microbiology Rotation II	2 credits
MLS 466	Clinical Chemistry Rotation II	2 credits
Total Credit Hours: 12		
Total MLS Certificate Credits: 40		

Medical Laboratory Science Categorical Certificates

Purpose

The Medical Laboratory Science (MLS) Program prepares categorical certificate graduates for service and leadership in the healthcare community by integrating its core values of knowledge, reverence, integrity, compassion, and excellence with a professional medical laboratory science education.

The MLS Program provides students with the educational foundation required to become medical laboratory scientists in one area of laboratory science through an intensive curriculum. Guided by the mission of Mercy Health Sciences University, and in compliance with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) Standards for Accredited Programs including the Unique Standards for the Medical Laboratory Scientist, the primary purpose is to facilitate the personal and professional development of students. The MLS Program provides students with the academic and clinical experiences needed to become caring, ethical, and competent medical laboratory professionals in one laboratory discipline who will work independently and in teams to perform laboratory testing, correlate, evaluate, develop, and assure validity of laboratory information and collaborate with other health professions in the diagnosis and treatment of patients.

Goals

- Prepare individuals to become laboratory professionals who perform wide ranging laboratory analysis accurately, timely, and efficiently in one laboratory discipline.
- Develop professionals who think logically, creatively, critically, responsively, and exercise good judgment.

Outcomes

Upon completion of the Medical Laboratory Science Program Categorical Certificate, the graduate will:

1. Accurately perform the full range of clinical laboratory tests in Clinical Chemistry and Urinalysis/Body Fluids or Hematology/Hemostasis and Urinalysis/Body Fluids or Immunohematology/Transfusion Medicine or Microbiology.
2. Interpret laboratory results.
3. Correlate laboratory results.
4. Demonstrate critical thinking when solving problems in all phases of laboratory processing and testing in one laboratory area.
5. Apply principles of quality assurance/performance improvement to one area of laboratory testing.
6. Demonstrate professional conduct in all activities.
7. Maintain continued professional development.
8. Apply safety standards and governmental regulations to one area of medical laboratory science.
9. Communicate appropriately and effectively with patients, the public, and members of the healthcare team.

Admission Requirements

To be considered for admission to a Medical Laboratory Science Categorical Certificate Program applicants must be admitted to Mercy Health Sciences University (*see Admissions section*) and meet the criteria listed below. Admission to the University does not guarantee admission to a program.

1. Achieve a minimum cumulative GPA of 2.5 on a 4.0 scale in all University-level coursework.
2. Achieve a minimum cumulative GPA of 2.5 on a 4.0 scale in all University-level coursework in science, including Biology, Microbiology, Zoology, Chemistry, Physics, Mathematics, Statistics and related courses.
3. Complete before enrollment the academic requirements for the desired categorical certificate:

Clinical Chemistry

- BA/BS degree from regionally or nationally accredited University or university with major in biological science or chemistry **OR** BA/BS degree with combination of 30 semester hours (45 quarter hours) in biology and chemistry within or in addition to BA/BS degree.
- Minimum 16 credits in Chemistry.

Clinical Hematology

- BA/BS degree from regionally or nationally accredited University or university with major in biological science or chemistry **OR** BA/BS degree with combination of 30 semester hours (45 quarter hours) in biology and chemistry within or in addition to BA/BS degree.

Clinical Immunohematology

- BA/BS degree from regionally or nationally accredited University or university with major in biological science or chemistry **OR** BA/BS degree with combination of 30 semester hours (45 quarter hours) in biology and chemistry within or in addition to BA/BS degree.

Clinical Microbiology

- BA/BS degree from regionally or nationally accredited University or university with major in biological science or chemistry **OR** BA/BS degree with combination of 30 semester hours (45 quarter hours) in biology and chemistry within or in addition to BA/BS degree
- Minimum one course in Microbiology with lab.

4. Earn a grade of "C" (not C-) or higher in all required courses.
5. Submit the required Mercy Health Sciences University application materials to the Admissions Office including:
   - Mercy Health Sciences University Application
   - Official University transcripts from all institutions attended
6. Submit the Medical Laboratory Science Categorical Certificate application materials including:
   - MLS Program Application
   - Three references:
   - The applicant will provide evaluators with a link to the online reference form. After completing the References and Essay section of the MLS Program application, the applicant will receive the link to the online reference form from the Program Chair. It is also available on the University website.

- Evaluators will complete and submit the online reference form.
- Two of the references must be from professors, laboratory instructors, or teaching assistants, and one may be from an employer or an additional professor, lab instructor, or teaching assistant.
- References from relatives are not acceptable.

Application Deadlines

For priority consideration, all required Mercy Health Sciences University and MLS Program Categorical Certificate application items must be received by October 15. Admission will be announced by December 1. Applications will be accepted after October 15th if open positions remain after priority consideration is completed.

Program Start	Application & Transcript Deadline
Fall Semester	October 15

Admission to the MLS Program Categorical Certificate is on a competitive basis. Meeting the minimum admission criteria does not guarantee admission into the MLS Program. Admission to Mercy Health Sciences University does not guarantee admission to the MLS Program Categorical Certificate.

The Medical Laboratory Science Program does not offer advance placement.

The categorical Certificates are not eligible for financial aid.

Graduation Requirements for the Certificate

- Successfully complete all coursework in both didactic and clinical portions of the program with a grade of "C" or higher (not "C-").
- Satisfactorily complete the applicable University graduation requirements (see Academic Policies and Procedures).

The granting of the certificate is not contingent upon the student passing any type of external certification or licensure examination.

Graduates are Encouraged to Apply and to Sit for the National Certification Exam

The Categorical exams (Technologist in Chemistry, Technologist in Hematology, Technologist in Immunohematology and Technologist in Microbiology) are offered by the American Society for Clinical Pathology Board of Certification (ASCP-BOC). Categorical certificate graduates are eligible through Route 3.

The Medical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Rd, Suite 720, Rosemont, IL 60018-5119: phone: 773-714-8880; email: info@naacls.org; website: www.naacls.org.

Failed Course Policy for MLS Categorical Certificates

Regarding progression in the program:

1. In order to be promoted to the next semester, students must successfully complete all clinical and didactic courses with a grade of "C" or higher (not "C-").
2. A student who fails three or more courses in the MLS Categorical Certificate Program (regardless of retakes) will be dismissed from the MLS Program and must sit out for at least one semester before reapplying to any clinical major.

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University MLS students. These abilities are based on job requirements for medical laboratory scientists at MercyOne Des Moines Medical Center, the site of most clinical experiences in the MLS Program. Applicants must review the following clinical standards to determine their ability and compatibility with the requirements of medical laboratory scientists.

Physical Activity Requirements

Frequent

Standing: While performing test analysis.
Reaching: While performing test analysis.
Fingering: While entering data into the computer.
Grasping: While handling equipment and specimens.
Talking: While communicating with co-workers, patients and/or staff to instruct or relay information.
Hearing: To receive information.
Lifting: Up to 10 pounds to put away/retrieve books, manuals, and trays.

Occasional

Pushing and Pulling: While stocking supplies, opening drawers, closing drawers and delivering specimens.
Lifting: Up to 50 pounds while handling supplies.
Climbing: While storing and retrieving supplies and ascending or descending stairs.
Stooping: With up to 20 pounds to put away supplies and change printer paper.

Physical Demand Requirements

Exerts up to 50 pounds of force occasionally, up to 30 pounds of force frequently, and 10 of force constantly to move objects.

Visual Acuity Requirements

Works with computer terminals, instrumentation with small moving parts, read labels and work lists, aliquots specimens and reagents, reads instructions, records data; needs to be able to distinguish between colors.

Intellectual and Emotional Requirements

- Ability to maintain satisfactory job performance and high standards of both courtesy and cooperation in dealing with co-workers, patients and visitors despite the stress of a hospital work environment.
- Ability to accept responsibility for the direction, control, or planning of an activity.

- Ability to interpret feelings, ideas, or facts in terms of personal viewpoint.
- Ability to influence people in their opinions, attitudes, or judgments about ideas or things.
- Ability to make generalizations, evaluations, or decisions based on sensory or judgmental criteria.
- Ability to make generalizations, evaluations, or decisions based on measurable or verifiable criteria.
- Ability to deal with people beyond giving and receiving instructions.
- Ability to perform under stress when confronted with emergency, critical, unusual, or dangerous situations, or situations in which working speed and sustained attention are make-or-break aspects of the job.
- Ability to manage situations requiring precise attainment of set limits, tolerances, or standards.
- Ability to perform a variety of duties, often changing from one task to another, without loss of efficiency or composure.

Tools/Equipment

- Automated analyzers
- Centrifuges
- Microscopes
- Pipetting devices
- Flow cytometers
- Laminar flow hoods
- Office equipment

Clinical Conditions

- Students are subject to chemical hazards.
- Students in the clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials, therefore, are included in the OSHA Exposure Control Plan with its specification for preventing contact with the above materials.
- Students are exposed to sharps.
- Students are subject to inside environmental conditions.

MLS Categorical Programs Curriculum

MLS Program Categorical Certificate – Clinical Chemistry

Description: Preparation for ASCP Technologist in Chemistry Exam Route 3, C(ASCP) Route 3
Program Length: 3 semesters: Fall, Spring, Summer

Clinical Chemistry Certificate Curriculum:

Required Courses for the Certificate		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 414	Urinalysis, Body Fluids and Microscopy Didactic	1 credit
MLS 415	Clinical Chemistry Didactic I	2 credits
MLS 418	Clinical Laboratory Mgmt. Didactic I	1 credit
MLS 436	Clinical Chemistry Rotation I	2 credits

MLS 445	Clinical Chemistry Didactic II	2 credits
MLS 466	Clinical Chemistry Rotation II	2 credits
Total Clinical Chemistry Certificate Credits: 11		

Recommended Course Sequence		
Semester I (Fall)		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 415	Clinical Chemistry Didactic I	2 credits
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 436	Clinical Chemistry Rotation I	2 credits
Total Credit Hours: 6		
Semester II (Spring)		
MLS 445	Clinical Chemistry Didactic II	2 credits
MLS 466	Clinical Chemistry Rotation II	2 credits
Total Credit Hours: 4		
Semester III (Summer)		
MLS 414	Urinalysis, Body Fluids and Microscopy Didactic	1 credit
Total Credit Hours: 1		
Total Clinical Chemistry Certificate Credits: 11		

MLS Program Categorical Certificate – Clinical Hematology

Description: Preparation for ASCP Technologist in Hematology, H(ASCP) Route 3
Program Length: 3 semesters: Fall, Spring, Summer

Clinical Hematology Certificate Curriculum:

Required Courses for the Certificate		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 414	Urinalysis, Body Fluids and Microscopy Didactic	1 credit
MLS 417	Clinical Hematology Didactic I	1 credit
MLS 418	Clinical Laboratory Mgmt. Didactic I	1 credit
MLS 433	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation I	2 credits
MLS 447	Clinical Hematology Didactic II	2 credits
MLS 463	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II	2 credits
MLS 477	Clinical Hematology Didactic III	2 credits
Total Clinical Hematology Certificate Credits: 12		

Recommended Course Sequence		
Semester I (Fall)		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 417	Clinical Hematology Didactic I	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 433	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation I	2 credits
Total Credit Hours: 5		
Semester II (Spring)		
MLS 447	Clinical Hematology Didactic II	2 credits
MLS 463	Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II	2 credits
Total Credit Hours: 4		
Semester III (Summer)		
MLS 414	Urinalysis, Body Fluids and Microscopy Didactic	1 credit

MLS 477	Clinical Hematology Didactic III	2 credits
Total Credit Hours: 3		
Total Clinical Hematology Certificate Credits: 12		

MLS Program Categorical Certificate – Clinical Immunohematology

Description: Preparation for ASCP Technologist in Blood Banking Exam Route 3, BB(ASCP) Route 3
Program Length: 2 semesters: Fall, Spring

Clinical Immunohematology Certificate Curriculum:

Required Courses for the Certificate		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 413	Clinical Immunohematology Didactic I	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 432	Clinical Immunohematology and Immunology Rotation I	2 credits
MLS 443	Clinical Immunohematology Didactic II	1 credit
MLS 462	Clinical Immunohematology and Immunology Rotation II	2 credits
Total Clinical Immunohematology Certificate Credits: 8		

Recommended Course Sequence		
Semester I (Fall)		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 413	Clinical Immunohematology Didactic I	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 432	Clinical Immunohematology and Immunology Rotation I	2 credits
Total Credit Hours: 5		
Semester II (Spring)		
MLS 443	Clinical Immunohematology Didactic II	1 credit
MLS 462	Clinical Immunohematology and Immunology Rotation II	2 credits
Total Credit Hours: 3		
Total Clinical Immunohematology Certificate Credits: 8		

MLS Program Categorical Certificate – Clinical Microbiology

Description: Preparation for ASCP Technologist in Microbiology Exam Route 3, M(ASCP) Route 3
Program Length: 3 semesters: Fall, Spring, Summer

Clinical Microbiology Certificate Curriculum:

Required Courses for the Certificate		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 418	Clinical Laboratory Mgmt. Didactic I	1 credit
MLS 422	Clinical Microbiology Didactic I	2 credits
MLS 435	Clinical Microbiology Rotation I	2 credits
MLS 452	Clinical Microbiology Didactic II	2 credits
MLS 465	Clinical Microbiology Rotation II	2 credits
MLS 472	Clinical Microbiology Didactic III	2 credits
Total Clinical Microbiology Certificate Credits: 12		

MLS Program Categorical Certificate – Clinical Microbiology

Recommended Course Sequence		
Semester I (Fall)		
MLS 411	Clinical Immunology Didactic	1 credit
MLS 418	Clinical Laboratory Management Didactic I	1 credit
MLS 422	Clinical Microbiology Didactic I	2 credits
MLS 435	Clinical Microbiology Rotation I	2 credits
Total Credit Hours: 6		
Semester II (Spring)		
MLS 452	Clinical Microbiology Didactic II	2 credits
MLS 465	Clinical Microbiology Rotation II	2 credits
Total Credit Hours: 4		
Semester III (Summer)		
MLS 472	Clinical Microbiology Didactic III	2 credits
Total Credit Hours: 2		
Total Clinical Microbiology Certificate Credits: 12		

Nursing Degrees

Philosophy Statement of Nursing Programs

The Nursing philosophy incorporates the domains of nursing, and the Mercy core values of Knowledge, Reverence, Integrity, Compassion, and Excellence. The faculty believe in supportive and caring relationships, which are characterized by a fundamental belief in the value of each individual, including Reverence and Integrity for the individual, while respecting diversity, beliefs, and lifestyle choices. Nurses incorporate the core values of Knowledge and Compassion when assisting individuals, families, and communities to achieve health goals within a safe and healthy environment. Interaction with and management of healthcare information using evolving technology is essential in providing high quality and safe care.

The nursing faculty at Mercy Health Sciences University are committed to student learning while serving as mentors for students as they (students) become members of the profession. It is believed a broad knowledge base is utilized from the arts and sciences taking into account complex ethical, social, cultural, legal, political, and economic principles while integrating principles of quality management, technology, and safety into nursing practice. Critical thinking and clinical reasoning are emphasized in the educational process, and the virtue of caring serves as the underpinning of all human relationships and is seen as an "overarching quality that gives action its moral character."

The faculty believe nursing education is the teaching/learning process by which faculty collaborate to assist students in achieving educational goals to support the highest level of nursing practice. The teaching/learning process enables students to fully incorporate evidence-based practice, engage in scholarly activities, and translate knowledge from health sciences to provide excellent nursing care within healthcare organizations and systems. Nursing and healthcare information is ever-changing and requires continuous learning which occurs through professional development.

After Admission to the ASN or BSN Majors

To ensure the safety of all clients served by Mercy Health Sciences University students and to meet regulations of our clinical partners regarding student participation in clinical site rotations as determined by the Iowa Board of Nursing, Accreditation Commission for Education in Nursing (ACEN), Commission on Collegiate Nursing Education (CCNE), and in compliance with state and federal laws. aA national criminal background check and child and dependent adult abuse checks will be conducted on each student seeking admission to an academic major that includes a clinical, preceptorship, internship, or similar experience that require patient interaction. Further, students are also required to provide documentation of current immunizations and personal health information as required by the clinical standards of the profession they have been admitted to study.

When seeking admission to an academic major with clinical, preceptorship, or internship opportunities, students will be required to establish an account with the University provider for background checks, documentation, and tracking. The student is responsible for paying the required fees directly to the vendor for this service to finalize admission to the academic major. Students who choose not to participate in these checks or are found to have criminal backgrounds may not be able to be admitted to the academic major or remain in the academic major. Students who are unable to fulfill the clinical standards of the profession may also not be able to be admitted to that specific academic major.

Failure to disclose a criminal record or founded case of abuse (regardless of whether perceived to be expunged in the past and later found on documentation provided to the University) or as part of the information supplied to the vendor at the time of admission to an academic major may also result in a denial of admission to the academic major.

A student's background is checked based on information obtained from the student's residency history. When the University is notified by the vendor that a student has a criminal record, the student will be expected to provide clarifying information about each conviction listed on the record for further evaluation by the Mercy Health Sciences University Background Check Review Committee. Students who have a criminal record may be denied admission to an academic major. They may be considered for admission only after undergoing a review by the Iowa Department of Human Services, and/or an evaluation by the Mercy Health Sciences University Background Check Review Committee.

If the student wishes to dispute the findings reported by the vendor, the student will be granted an opportunity to do so as outlined under the Fair Credit Reporting Act (FCRA), guided by the instructions of the vendor. Denial of admission may be appealed to the Vice President of Academic Affairs/Provost if documentation of a resolution to the case can be made. Criminal and abuse registry documents are maintained by the vendor and are required to be accessible while enrolled at the University. Criminal records are not part of a student's permanent record. Various licensing boards may restrict eligibility for professional licensure/certification if a person has been convicted of a felony or has participated in other illegal or unethical behaviors. Students under these situations are encouraged to contact the appropriate licensure/certification board prior to seeking admission to an academic major. In cases where a licensure/certification board does grant permission to eventually test for certification/licensure following successful completion of a major and graduation from a Mercy Health Sciences University with an academic degree or certificate, the University makes no stipulations on the ability of the student to find employment within the certification/licensure career field.

1. Upon admission, students must immediately initiate a criminal background and a child and dependent adult abuse check with the University specified vendor along with the required payment to the vendor. The student must authorize the vendor to provide the results of these checks as part of the final verification for admission to the academic major. In accordance with Iowa Board of Nursing requirements and guidance, Mercy Health Sciences University may require students to complete additional criminal background checks at intervals more frequent than at the time of admission.

11. Complete documentation needed on immunizations and upload into the vendor's software. It is advised to submit the Immunization Form (form provided by Student Success Center) to your primary healthcare provider as soon as possible to ensure its completion in advance of the admission deadline to the major established by the Chair. The Immunization Form verifies compliance with the following:

2. Two-step TB skin testing within the past year; then one-step TB skin test yearly after admission. Acceptable alternatives to TB skin testing are a negative T-spot blood test OR a negative QuantiFERON Gold blood test. If a positive skin test or a history of positive tests, a negative chest-ray report administered within the past 12 months is required; then a TB Questionnaire completed yearly after admission (form provided by Student Success Center).

    a. Hepatitis B: Completion of series (three doses), OR initiation of the Hepatitis B series (if series is in process, student must meet all immunization deadlines per CDC guidelines to remain in clinicals or practicums), OR a positive titer showing full immunity.

b. Measles, Mumps, and Rubella (MMR): Completion of series (two doses) OR positive titers of all three diseases showing full immunity.
c. Chicken Pox (Varicella): Completion of series (two doses), OR positive titer showing full immunity, OR proof of disease by medical provider documentation.

3. Seasonal flu vaccination is required annually to participate in courses that include a clinical rotation during flu season.
4. Tdap or TDaP: completion of series. Must be renewed every 10 years.
5. Acknowledge personal ability to adhere to the clinical standards for the academic major.
6. Upload into the vendor's software proof of completion and current certification in American Heart Association Basic Life Support Provider or American Red Cross.
7. Associate Deans may require additional documentation. Deadlines for completion will be noted on the vendor's software.
   - To ensure the safety of those in our community and University community, as well as adherence to state and local licensure laws and regulations, mandatory and reasonable suspicion drug testing is required at Mercy Health Sciences University for all students in a program with a clinical component. Consult the Student Handbook for additional information.
8. A Failure to complete the clinical compliance requirements by the start of clinicals will result in removal from the clinical course. Failure to complete and/or update the clinical compliance information, as notified, will result in removal from a clinical site until the requirements are met. This will also result in an unexcused absence of the clinical for each occurrence.
9. Failure to complete any of the procedures for the major may delay or end the enrollment process.

Promotion Policy for ASN, BSN, Accelerated BSN, and RN to BSN Students

To be promoted to the next semester, students must:

1. Complete prerequisite coursework (Nursing majors' required arts and sciences and professional education courses) with a grade of "C" or higher (not "C-").
2. Successfully, complete all clinical requirements for the semester.
3. Pre-licensure students must comply with the Standardized Testing and Remediation as stated in the *Student Handbook*.
4. A student who fails three or more Nursing program courses (regardless of retakes) will be dismissed from the program and must sit out for at least one semester before reapplying to any clinical major. Readmission is not guaranteed.
5. A student who is academically failing in the ABSN program has the option of applying for admission to the Associate of Science in Nursing (ASN) or the BSN program delivered in the traditional format.
6. Students who transfer from the ABSN program to the ASN or BSN programs are permitted to take chemistry concurrently with nursing program courses.
7. A student who is academically failing in the BSN program, could appeal to the Dean of Nursing to re-enroll in the ASN program offered by the University.

Clinical Standards (ASN and BSN Majors)

The following clinical standards are required of Mercy Health Sciences University nursing students. These abilities are based upon requirements for Registered Nurses at MercyOne Des Moines Medical Center, the site of many clinical experiences in the nursing majors. Applicants must

review the following clinical standards to determine their ability and compatibility with physical requirements of registered nurses. Accommodations are provided in compliance with University policy, section 504 of the Rehabilitation Act, and the Americans with Disabilities Act (ADA).

Constant

Reaching – extending hand(s) and arm(s) in any direction.
Standing – maintaining an upright position.
Walking – moving about on foot to accomplish tasks.
Lifting – raising objects from a lower to a higher position or moving objects horizontally from position to position – would include transfer of a patient from bed to cart/chair.
Talking – expressing or exchanging ideas by means of the spoken word – those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
Hearing – perceiving the nature of sounds at normal range, ability to receive detailed information through oral communication, and to make fine discriminations in sound, such as when auscultating and percussing.
Repetitive motions – substantial movements (motion) of the wrist, hands, and/or fingers.
Balancing – maintaining equilibrium to prevent falling when assisting patients with activity.
Pulling – using upper extremities to exert force to draw, drag, haul or tug objects in a sustained motion.
Grasping – applying pressure to an object with the fingers and palm.

Frequent

Stooping – bending body downward and forward by bending spine at the waist (for example, emptying suction canisters that are below waist level or obtaining supplies from low shelves).
Fingering – writing, taking vital signs, feeding patients, collecting specimens, or otherwise working primarily with fingers rather than with the whole hand or arm as in handling.
Kneeling – bending legs at the knee to come to a rest or knee.
Crouching – bending the body downward and forward by bending leg and spine – (for example, emptying foley bag attached to bed frame).
Pushing – using upper extremities to press against something with steady force in order to thrust forward, downward or outward.
Feeling – perceiving attributes of objects, such as size, shape, temperature or texture by touching with skin, particularly that of fingertips and palm.

Occasional

Climbing – stairs, stools, and ramps.

Physical Demand Requirements

Heavy clinical assignments - Exerting up to 65 pounds push/pull force to move frequently, lifting up to 50 pounds occasionally, and lifting up to 40 pounds frequently, and lifting up to 20 pounds constantly, to move patients and/or objects.
However, when performing patient care service delivery, can include: Very heavy clinical assignments - exerting up to 100 pounds of force occasionally and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

Visual Acuity Requirements

Students must be able to:

10. Read pertinent printed material and distinguish colors.
11. Include inspection during patient care.

12. Accurately read measurements on patient related equipment – some examples include thermometers, mechanical gauges, glucometers, IV pumps, and computer monitor displays.

Intellectual/Emotional Requirements

Students must be able to:

13. Perform under stress when confronted with emergency, critical, or unusual, dangerous situations, or situations in which work speed and sustained attention are make-or-break aspects of the job.
14. Perform a variety of duties, often changing from one task to another without loss of efficiency or composure.
15. Maintain a high standard of courtesy and cooperation in dealing with colleagues, patients, instructors, and visitors, as well as perform job functions satisfactorily despite the stress of a hospital work environment.

Tools/Equipment

Standard medical and nursing equipment including, but not limited to, a stethoscope, pen light, a watch with a second hand (no smart watches), and face mask or goggles for clinical use. Students are not permitted to carry a cell phone in patient care areas.

Clinical Conditions

16. Students in clinical settings have been identified as having the likelihood of clinical exposure to blood or other potentially infectious materials and, therefore, are included in the OSHA Exposure Control Plan with all its specifications for preventing contact with the above materials.
17. The student may be required to wear a face mask, gown and/or gloves.
18. The student is subject to inside environmental conditions, protection from weather conditions but not necessarily from temperature changes.
19. The student is subject to hazards in the work area: May be exposed to chemotherapy spills, chemical cleaners, radioactive implants/isotopes, and /or sharp instruments.
20. The student is subject to a range of noise levels from quiet to moderate: phones, mechanical alarms (e.g. IV pumps, ventilators, and cardiac monitors) and occasional construction work.

Eligibility for Clinical Education

Nursing courses with a clinical or practicum component may not be taken by a person:

21. Who has been denied licensure by the Board.

1. Whose license is currently suspended, surrendered or revoked in any United States jurisdiction.
2. Whose license is currently suspended, surrendered or revoked in another country due to disciplinary action.

Anytime a student incurs a criminal charge, it is the student's obligation to self-report to the Dean of Nursing. An individualized plan will be discussed at that time.

Program Requirement: Mercy Health Sciences University is pleased to provide a 2 to 3-day comprehensive NCLEX review course for all nursing students to assist in success with the RN licensure exam. Attendance for this review is mandatory and will be completed in addition to

regular required coursework/course hours in the last semester of each nursing program.

Mercy Health Sciences University Association of Nursing Students (MCANS)

The faculty of Mercy Health Sciences University supports the concept of nursing students enhancing their professionalism through student participation in professional organizations. In support of this, all new students in any nursing major are encouraged to become members of the Mercy Health Sciences University Association of Nursing Students (MCANS). Student membership includes membership in the Iowa Association of Nursing Students (IANS) and the National Student Nurses Association (NSNA). Students learn about the values and culture of the nursing profession through active involvement in the NSNA. Students in MCANS will be involved in fundraising and community service activities, and social and professional events. They will have an opportunity to serve as officers of the organization, be committee chairpersons or members, and to attend state and national conventions as delegates or alternates. Benefits of NSNA are outlined in the registration form.

Bachelor of Science in Nursing

Mercy Health Sciences University offers a variety of pathways for a baccalaureate degree in nursing.

- Accelerated BSN
- Traditional BSN
- RN to BSN

Associate of Science in Nursing

Purpose

The Associate of Science in Nursing (ASN) degree leads to initial eligibility for the registered nurse licensing examination (NCLEX-RN). Graduates are prepared to provide entry-level, holistic nursing care for diverse clients in structured settings.

Following successful completion of NRP 196, the student may elect to obtain the PN Diploma, take the NCLEX-PN licensing examination, and work as an LPN while completing the final year of the ASN program.

Program Learning Outcomes: Practical Nursing Program

Graduates from the Mercy Health Sciences University Practical Nursing Program will be expected to achieve the following outcomes:

1. Coordinate care with members of the healthcare team using nursing informatics to achieve positive patient outcomes in a variety of settings.
2. Utilize clinical judgment to provide safe and quality care for individuals across the lifespan under the direction of the qualified health professional.
3. Provide patient-centered care utilizing cultural sensitivity for diverse individuals within a family context.
4. Demonstrate professionalism and adherence to practical nursing standards.

Program Learning Outcomes: Associate Degree Nursing Program

Graduates from the Mercy Health Sciences University Associate Degree Nursing Program will be expected to achieve the following outcomes:

1. Coordinate care with members of the healthcare team using nursing informatics to achieve positive patient outcomes in a variety of settings.
2. Utilize clinical judgment to provide safe and quality care for individuals across the lifespan.
3. Provide holistic patient-centered care utilizing cultural sensitivity for diverse individuals within a family context.
4. Demonstrate professionalism and adherence to nursing practice standards.
5. Provide health promotion and preventative care for individuals, families, and groups.

Iowa Articulation Plan for Nursing Education

Mercy Health Sciences University serves as a sending institution (ASN Degree) in the Iowa Articulation Plan for Nursing Education.

Admission Requirements for ASN

To be considered for admission to the ASN pathway applicants must be admitted to Mercy Health Sciences University and fulfill the program-specific admission requirements below. Admission to the University does not guarantee admission to a major. Admission also requires:

1. Successful completion (a C or higher) of the following courses, with an extracted GPA of 2.7 is required:

    - Human Physiology (with lab), English Comp I, General Psychology, University Math, and Human Anatomy (with lab).

2. Non-Mercy Health Sciences University LPNs who wish to complete the ASN will take an NCLEX-PN Predictor Exam to determine placement in the respective program. The cost of the predictor exam will be paid by the student. Students who are unable to pay for the predictor exam may request financial assistance from the Student Success Center.

Admissions Requirements for Licensed Practical Nurses (LPN)

Applicants with an LPN licensure may apply for advanced placement in the ASN program according to the following guidelines:

1. The applicant must hold an active, un-encumbered license and be a practicing LPN.
2. LPN licensure verification needs to occur prior to pursuing this option.
3. Once licensure verification has taken place, the applicant can take an LPN Placement Test via ATI PN Comp Predictor.
4. With the test, there is a "self-pay option": students enter a code and are prompted to pay for the PN Comp Predictor which is $71.00* (*subject to ATI change in fees annually).
5. If the result of the PN Comp Predictor is a score of 75% (raw score), the NRP 107 and NRP 117 courses will be waived.

Nursing Program Dismissal (ASN)

- Please refer to the Promotion Policy for students provided in the Academic Policies & Procedures Section above.

Graduation Requirements ASN Degree

To receive the Associate of Science in Nursing Degree, students must meet the following requirements:

- Complete all requirements of the ASN degree.
- Complete all nursing and arts and sciences courses with a grade of "C" or higher (not "C-").
- Pass all required clinical skill competencies.
- Satisfactorily complete:
    - ASN Reflective essay.
    - Comprehensive NCLEX predictive exams and remediation plan.
    - An approved NCLEX Review Course
- Satisfactorily complete the University Graduation Requirements.

ASN Curriculum

The six-semester nursing curriculum is based on a total of 80 credit hours, which includes 37 credits from arts and sciences and 43 credits of nursing.
[Students who began the ASN program prior to Fall 2023: please refer to the 2022-2023 Catalog for the curriculum path specific to your academic plan.]

Required Arts and Science Courses for the Major		Credits
BIO 180*	Human Anatomy (with Lab)	4 credits
BIO 185	Human Physiology (with Lab)	4 credits
CHE 100*	Chemistry**	3 credits
ENG 101*	English Composition I	3 credits

ENG 102	English Composition II	3 credits
PSY 101*	General Psychology	3 credits
###	Humanities Elective	3 credits
MAT###*	College-level Math	3 credits
BIO 130 or BIO 203	Principles of Microbiology (with Lab) or Microbiology (with Lab)	4 credits
PSY 202	Developmental Psychology	3 credits
SPE 1XX	Speech	1 credit
SVL 285	Servant Leadership	3 credits
Total Credits: 37		
Required Courses for the ASN Major		
NRP 107	Role of the Nurse	3 credits
NRP 111	Basic Pharmacology and Math for Nurses	3 credits
NRP 113	Foundations of Pathophysiology	2 credits
NRP 117	Foundations of Nursing Practice	5 credits
NRP 131	Manager of Care I	4 credits
NRP 187	Manager of Care II	4 credits
NRP 191	Principles of Maternal-Child & Mental Health Nursing	5 credits
NRP 196	Capstone I	2 credits
NRP 201	Advanced Manager of Care I	4 credits
NRP 221	Advanced Manager of Care II	4 credits
NRP 261	Nursing Practicum I	3 credits
NRP 262	Nursing Practicum II	2 credits
NRP 298	Capstone II	2 credits
Total Credits: 43		
*ASN Program Prerequisite courses		
** Students who transfer from the ABSN program are permitted to take Chemistry concurrently with nursing program courses.		

Outline of Course Sequence*		
Semester I		
NRP 107	Role of the Practical Nurse	3 credits
NRP 113	Foundations of Pathophysiology	2 credits
NRP 117	Foundations of Nursing Practice	5 credits
Total Credit Hours: 10		
Semester II		
NRP 111	Basic Pharmacology and Math for Nurses	3 credits
NRP 131	Manager of Care I	4 credits
PSY 202	Developmental Psychology	3 credits
CHE 100	Chemistry	3 credits
Total Credit Hours: 13		
Semester III		
NRP 187	Manager of Care II	4 credits
NRP 191	Principles of Maternal-Child & Mental Health Nursing	5 credits
BIO 203	Microbiology (with lab)	4 credits
Total Credit Hours: 13		
Semester IV		
NRP 196	Capstone I**	2 credits

NRP 201	Advanced Management of Care I	4 credits
SVL 285	Servant Leadership (or General Education course, if needed)	3 credits
XXX	Humanities elective	3 credits
Total Credit Hours: 12		
Semester V		
NRP 221	Manager of Care II	4 credits
NRP 261	Nursing Practicum I	3 credits
SPE 105	Small Group Communication	1 credit
Eng 102	English Composition II	3 credits
Total Credit Hours: 11		
Semester VI		
NRP 262	Nursing Practicum II	2 credits
NRP 298	Capstone II	2 credits
Total Credit Hours: 4		
Total ASN Degree Credits: 80		

*Note: Nursing courses must be taken sequentially.

**Following successful completion of NRP 196, the student may elect to obtain the PN Diploma and sit for the NCLEX-PN licensing examination.

Students who successfully complete this associate degree can advance into the RN to BSN, Healthcare Administration, Health Information Management, Health Science, or Public Health majors at Mercy Health Sciences University.

Accelerated Bachelor of Science in Nursing

Purpose

The Bachelor of Science in Nursing (BSN) degree leads to initial eligibility for the registered nurse licensing examination. Baccalaureate nursing education prepares graduates for the practice of professional nursing in a variety of structured and other settings and provides the basis for advanced practice and specialization.

The Accelerated 12-Month BSN pathway is designed for full-time study. The curriculum is based on a total of 120 credit hours, which includes 52 credits of nursing coursework and 68 credits of general education coursework, including SVL 285: Servant Leadership.

Students with an earned bachelor's degree from an accredited institution are considered having met all Mercy Health Sciences University core curriculum requirements except Servant Leadership. This applies only to the Accelerated BSN program.

Outcomes

Upon completion of the Bachelor of Science in Nursing degree, the graduate will:

1. Deliver culturally sensitive, holistic, compassionate person-centered care that respects individual values, preferences, and needs, while promoting health equity, addressing social determinants of health, and upholding ethical principles to enhance the health and well-being of diverse populations. (Domains 2 & 3)
2. Develop and sustain a professional nursing identity rooted in accountability, ethical values, and collaborative practice, while engaging in self-reflection and activities that promote personal health, resilience, lifelong learning, and leadership to support ongoing growth and expertise in the nursing profession. (Domains 6, 9, & 10)
3. Lead and collaborate effectively within complex healthcare systems, utilizing interprofessional teamwork, informatics, and communication skills and technologies to coordinate resources and deliver safe, equitable, and high-quality care. (Domains 5, 7 & 8)
4. Apply principles of safety, quality improvement, and evidence-based practices to enhance care quality, minimize risks, and maintain adherence to professional and regulatory standards in the delivery of care for diverse populations. (Domains 4, 5)
5. Synthesize and apply nursing knowledge, along with insights from liberal arts, natural, and social sciences, to support clinical judgment, drive innovation, and advance professional nursing practice. (Domain 1)

Admission Requirements for ABSN

To be considered for admission to the ABSN pathway, applicants must be admitted to Mercy Health Sciences University (refer to the *Admissions* section) and meet the criteria below. Admission to the University does not guarantee admission to a major.
Students who have earned a previous Bachelor's, Associate of Arts (A.A.), or Associate of Science (A.S.) degree are considered to have met all Mercy Health Sciences University Core requirements except for Servant Leadership.

1. Prior completion of a minimum of 65 hours of University credit, or the completion of a baccalaureate degree in a non-nursing major.
2. Prerequisites: must earn a grade of "C" (not C-) or higher in the following **University-level** courses:
    - Human Anatomy (with lab)
    - Human Physiology (with lab)
    - Microbiology (with lab)
    - English Composition I
    - General Psychology or Developmental Psychology
    - College-level Math (3 credits)
    - Lower or upper-level Statistics (3 credits)
    - Lower or upper-level Nutrition (3 credits)
3. Grade Point Average on a 4.0 scale:
    - Earn an extracted GPA of 3.0 or higher from the prerequisites listed above.
4. Successful completion of all prerequisite courses before starting the program.
5. All Mercy Health Sciences University Core requirements must be completed prior to beginning the A-BSN major except for SVL285, Servant Leadership.

Nursing Program Dismissal (Accelerated BSN)

- Please refer to the Promotion Policy for students provided in the Academic Policies & Procedures Section above.

Graduation Requirements Accelerated BSN Degree

To receive the Bachelor of Science in Nursing Degree, students must meet the following requirements:

- Complete all requirements of the accelerated BSN major.
- Complete all required nursing and arts and sciences courses with a grade of "C" or higher (not "C-").
- Pass all required clinical skill competencies.
- Satisfactorily complete the BSN reflective essay. Satisfactorily complete comprehensive NCLEX predictive exams and remediation plan.
- Satisfactorily complete the University graduation requirements.

Accelerated BSN Curriculum

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements. *[Students who began the ABSN program prior to Fall 2026: please refer to the 2024-2026 Catalog for the curriculum path specific to your academic plan.]*

Course Requirements for the Major		
NUA 301	Introduction to Safe Medication Administration	1 credit
NUA 303	Nursing Pharmacology	3 credits
NUA 312	Nursing Pathophysiology	3 credits
NUA 314	Fundamentals of Nursing I	5 credits
NUA 321	Health Promotion Across the Lifespan	2 credits
NUA 324	Fundamentals of Nursing II	5 credits
NUA 364	Person-Centered Care I	5 credits
NUA 374	Concepts of Population Health	3 credits
NUA 401	Nursing Research and evidence-Based Practice	2 credits
NUA 404	Maternal Child Nursing	4 credits
NUA 414	Person-Centered Care II	4 credits
NUA 424	Mental Health Nursing	2 credits
NUA 444	Person-Centered Care III	4 credits
NUA 448	Capstone I	1 credit
NUA 456	Role of the Nurse Leader	3 credits
NUA 464	Nursing Preceptorship	3 credits
NUA 478	Capstone II	2 credits
Total Nursing Credit Hours: 52		
Total BSN Degree Credits: 120		

Recommended Course Sequence		
Semester I, 1st 8 weeks		
NUA 301	Introduction of Safe Medication Administration	1 credit
NUA 312	Nursing Pathophysiology	3 credits
NUA 314	Fundamentals of Nursing I	5 credits
Total Credit Hours: 9		
Semester I, 2nd 7 weeks		
NUA 303	Nursing Pharmacology	3 credits
NUA 321	Health Promotion Across the Lifespan	2 credits
NUA 324	Fundamentals of Nursing II	5 credits
Total Credit Hours: 10		
Semester II, 1st 8 weeks		
NUA 364	Person-Centered Care I	5 credits
NUA 374	Concepts of Population Health	3 credits
NUA 424	Mental Health Nursing	2 credits
Total Credit Hours: 10		
Semester II, 2nd 7 weeks		
NUA 404	Maternal Child Nursing	4 credits
NUA 414	Person-Centered Care II	4 credits
Total Credit Hours: 8		
Semester III, 1st 8 weeks		
NUA 401	Nursing Research and Evidence-Based Practice	2 credits

NUA 444	Person-Centered Care III	4 credits
NUA 448	Capstone I	1 credit
Total Credit Hours: 7		
Semester III, 2nd 7 weeks		
NUA 456	Role of the Nurse Leader	3 credits
NUA 464	Nursing Preceptorship	3 credits
NUA 478	Capstone II	2 credits
Total Credit Hours: 8		
SVL 285	Servant Leadership *May be taken at any point during the program (graduation requirement).	3 credits
Total ABSN Degree Credits: 120		

Bachelor of Science in Nursing

Purpose

The Bachelor of Science in Nursing (BSN) degree leads to initial eligibility for the registered nurse licensing examination. Baccalaureate nursing education prepares graduates for the practice of professional nursing in a variety of structured and other settings and provides the basis for advanced practice and specialization.

The BSN is designed for full-time study. The curriculum is based on a total of 120 credit hours, which includes 67 credits of nursing coursework and 53 credits of general education coursework.

Outcomes

Upon completion of the Bachelor of Science in Nursing major, the graduate will:

1. Deliver culturally sensitive, holistic, compassionate person-centered care that respects individual values, preferences, and needs, while promoting health equity, addressing social determinants of health, and upholding ethical principles to enhance the health and well-being of diverse populations. (Domains 2 & 3)
2. Develop and sustain a professional nursing identity rooted in accountability, ethical values, and collaborative practice, while engaging in self-reflection and activities that promote personal health, resilience, lifelong learning, and leadership to support ongoing growth and expertise in the nursing profession. (Domains 6, 9, & 10)
3. Lead and collaborate effectively within complex healthcare systems, utilizing interprofessional teamwork, informatics, and communication skills and technologies to coordinate resources and deliver safe, equitable, and high-quality care. (Domains 5, 7 & 8)
4. Apply principles of safety, quality improvement, and evidence-based practices to enhance care quality, minimize risks, and maintain adherence to professional and regulatory standards in the delivery of care for diverse populations. (Domains 4, 5)
5. Synthesize and apply nursing knowledge, along with insights from liberal arts, natural, and social sciences, to support clinical judgment, drive innovation, and advance professional nursing practice. (Domain 1)

Admission Requirements for BSN

To be considered for admission to the traditional BSN pathway applicants must be admitted to Mercy Health Sciences University and fulfill the program-specific admission requirements below. Admission to the University does not guarantee admission to a major.

1. Successful completion (a C or higher) of the following courses, with an extracted GPA of 2.7 is required:
12. Chemistry, English Comp I, General Psychology, College Math, and Human Anatomy (with lab)*
3. *Anatomy must be completed within 5 years of admission to the program.
4. Non-Mercy Health Sciences University LPNs who wish to complete the traditional BSN program will take an NCLEX-PN Predictor Exam to determine placement in the respective program. The cost of the predictor exam will be paid by the student. Students who are unable to pay for the predictor exam may request financial assistance from the Student Success Center.

Admissions Requirements for Licensed Practical Nurses (LPN)

Applicants with an LPN licensure may apply for advanced placement in the BSN program according to the following guidelines:

1. The applicant must hold an active, un-encumbered license and be a practicing LPN.
2. LPN licensure verification needs to occur prior to pursuing this option.
3. Once licensure verification has taken place, the applicant can take an LPN Placement Test via ATI PN Comp Predictor.
4. With the test, there is a "self-pay option": students enter a code and are prompted to pay for the PN Comp Predictor which is $71.00* (*subject to ATI change in fees annually).
5. If the result of the PN Comp Predictor is a score of 75% (raw score), NUR 105, NUR115, NUR125, and NUR 275 can be waived.

Nursing Program Dismissal (BSN)

- Please refer to the Promotion Policy for Nursing Students provided in the general Nursing Degrees section above.

Graduation Requirements BSN Degree

To receive the Bachelor of Science in Nursing Degree, students must meet the following requirements:

- Complete all requirements of the BSN major.
- Complete all required nursing and arts and sciences courses with a grade of "C" or higher (not "C-").
- Pass all required clinical skill competencies.
- Satisfactorily complete:
    - BSN Reflective essay.
    - Comprehensive NCLEX predictive exams and remediation plan.
    - An approved NCLEX Review Course
5. University graduation requirements.

BSN Curriculum

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements. *[Students who began the BSN program prior to Fall 2026: please refer to the 2025-2026 Catalog for the curriculum path specific to your academic plan.]*

Required Arts and Science Courses for the Major		
BIO 180	Human Anatomy (w/Lab)	4 credits
BIO 185	Human Physiology (w/Lab)	4 credits
BIO 130 or BIO 203	Principles of Microbiology (with Lab) or Microbiology (w/Lab)	4 credits
*BIO 225 or *BIO 302	Principles of Pathophysiology or Pathophysiology	3 credits
CHE 100	Chemistry for Health Professionals	3 credits
ENG 101	English Composition I	3 credits
ENG 102	English Composition II	3 credits
###	Humanities Elective	3 credits
MAT ###	College-level Math	3 credits
MED 101	Medical Terminology	1 credit
NTR 205 or NTR 300	Nutrition (upper or lower level)	3 credits
PHI 314 or 320	Religion/Philosophy Elective (Ethics or Bioethics)	3 credits
PSY 101	General Psychology	3 credits
PSY 202	Developmental Psychology	3 credits
SOC 102	Sociology	3 credits
SPE 105	Small Group Communication	1 credit
STA 165 or STA 330	Fundamentals of Statistics or Biostatistics	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 53		
Course Requirements for the Major: Fall 2026 Start		
NUR 134	Fundamentals I	6 credits
NUR 207	Introduction to Pharmacology	3 credits
NUR 234	Fundamentals II	6 credits
NUR 264	Concepts of Nursing I	5 credits
NUR 287	Application of Nursing Pharmacology	2 credits
NUR 306	Concepts of Health Promotion	2 credits
NUR 324	Concepts of Nursing II	4 credits
NUR 344	Mental Health Nursing Concepts and Practice	3 credits
NUR 354	Pediatric Nursing Concepts and Practice	3 credits
NUR 367	Gerontological Nursing Concepts and Practice	2 credits
NUR 384	Concepts of Nursing III	4 credits
NUR 431	Nursing Research and Evidence-Based Practice	3 credits
NUR 414	Concepts of Nursing IV	4 credits
NUR 424	Maternal-Newborn Nursing Concepts and Practice	3 credits
NUR 394	Population Health Nursing Concepts and Practice	3 credits
NUR 468	Nursing Leadership	3 credits
NUR 453	Informatics and Financial Management in Nursing	3 credits
NUR 464	Complex Nursing Practice	3 credits
NUR 474	Professional Nursing Practicum	3 credits

NUR 478	Capstone	2 credits
Total Credit Hours: 67		
Total BSN Degree Credits: 120		

Recommended Course Sequence		
Semester 1		
BIO 180	Human Anatomy (with lab)	4 credits
CHE 100	Chemistry for Health Professionals*	3 credits
ENG 101	English Composition I	3 credits
PSY 101	General Psychology	3 credits
###	Math Elective 100 level or higher	3 credits
Total Credit Hours: 16		
Semester II		
BIO 185	Human Physiology (with lab)	4 credits
MED 101	Medical Terminology	1 credit
NUR 134	Fundamentals I	6 credits
STA 165 or STA 330	Statistics OR Biostatistics 330	3 credits
ENG 102	English Composition II	3 credits
Total Credit Hours: 17		
Semester III		
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
NUR 207	Introduction to Pharmacology	3 credits
NUR 234	Fundamentals II	6 credits
NTR 205 or 300	Nutrition or Applied Nutrition	3 credits
Total Credit Hours: 15		
Semester IV		
NUR 264	Concepts of Nursing I	5 credits
NUR 287	Application of Nursing Pharmacology	2 credits
BIO 130 or BIO 203	Principles of Microbiology (with Lab) or Microbiology (with Lab)	4 credits
PSY 202	Developmental Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 15		
Semester V		
NUR 306	Concepts of Health Promotion	2 credits
NUR 324	Concepts of Nursing II	4 credits
NUR 344	Mental Health Nursing Concepts and Practice	3 credits
PHI 314 or 320	Ethics or Bioethics	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 15		
Semester VI		
NUR 354	Pediatric Concepts and Nursing Practice	3 credits
NUR 367	Gerontological Nursing Concepts and Practice	2 credits
NUR 384	Concepts of Nursing III	4 credits

NUR 431	Nursing Research & Evidence-Based Practice	3 credits
SOC 102	Sociology	3 credits
Total Credit Hours: 15		
Semester VII		
NUR 394	Population Health Nursing Concepts and Practice	3 credits
NUR 414	Concepts of Nursing IV	4 credits
NUR 424	Maternal Newborn Nursing Concepts and Practice	3 credits
NUR 468	Nursing Leadership	3 credits
Total Credit Hours: 13		
Semester VIII		
NUR 453	Informatics and Financial Management in Nursing	3 credits
NUR 464	Complex Nursing Practice	3 credits
NUR 474	Professional Nursing Practicum	3 credits
NUR 478	Capstone	2 credits
###	Humanities Elective	3 credits
Total Credit Hours: 14		
Total BSN Degree Credits: 120		

* Students who transfer from the ABSN program are permitted to take Chemistry concurrently with nursing program courses.

RN to BSN

Purpose

The Registered Nurse to Bachelor of Science in Nursing (RN to BSN) is an online program designed for registered nurses. Baccalaureate nursing education prepares graduates for the practice of professional nursing in a variety of structured and other settings and provides the basis for advanced practice and specialization.

The RN to BSN major is designed for part-time study. Mercy Health Sciences University participates in the Iowa Articulation Plan for Nursing Education. Credit is awarded for nursing knowledge, competency and skills acquired in associate degree or diploma programs in nursing. Transfer of credits follows the Iowa Articulation Plan options guidelines.

Upon completion of the Bachelor of Science in Nursing major, the graduate will:

1. Deliver culturally sensitive, holistic, compassionate person-centered care that respects individual values, preferences, and needs, while promoting health equity, addressing social determinants of health, and upholding ethical principles to enhance the health and well-being of diverse populations. (Domains 2 & 3)
2. Develop and sustain a professional nursing identity rooted in accountability, ethical values, and collaborative practice, while engaging in self-reflection and activities that promote personal health, resilience, lifelong learning, and leadership to support ongoing growth and expertise in the nursing profession. (Domains 6, 9, & 10)
3. Lead and collaborate effectively within complex healthcare systems, utilizing interprofessional teamwork, informatics, and communication skills and technologies to coordinate resources and deliver safe, equitable, and high-quality care. (Domains 5, 7 & 8)
4. Apply principles of safety, quality improvement, and evidence-based practices to enhance care quality, minimize risks, and maintain adherence to professional and regulatory standards in the delivery of care for diverse populations. (Domains 4, 5)
5. Synthesize and apply nursing knowledge, along with insights from liberal arts, natural, and social sciences, to support clinical judgment, drive innovation, and advance professional nursing practice. (Domain 1)

Block Transfer Credit

For the purpose of admission to the RN-BSN program, Mercy Health Sciences University recognizes block transfer credit from Associate of Science (ASN/ADN), Associate of Arts (AA) and Associate of Applied Science (AAS in nursing) nursing degrees where national program accreditation is held at the time of degree conferral.

Block transfer of 84 credits and advanced standing for Licensed RNs that graduated from an accredited associate degree nursing program will be recognized upon admission to the RN-BSN program. Admitted students will enter the University having fulfilled the general education and core requirements except for the Servant Leadership and Biostatistics courses.

40	Licensed RN – Prior Learning Credit
44	Transfer in Accredited associate degree
3	Biostatistics

3	Servant Leadership
30	Nursing Major (not including Biostats or SVL)
120	**Total Credits for BSN Degree**

Applicants seeking admission to Mercy Health Sciences University's RN-BSN program from a non-accredited associate degree program are evaluated for course-specific transfer credit based on designated program requirements and must meet Mercy Health Sciences University core education requirements.

Admission Requirements

To be considered for admission to the RN to BSN major, applicants must be admitted to Mercy Health Sciences University (refer to the *Admissions* section) and meet the criteria below. Admission to the University does not guarantee admission to a major.

- Completion of a minimum of 41 hours of general education courses* which must include:
  - Statistics†
  - Anatomy
  - Physiology
  - Microbiology
  - Introductory Psychology
  - Introductory Sociology

1. Copy of an active license to practice as a Registered Nurse.‡
2. All General Education requirements must be completed prior to beginning the RN to BSN except for Servant Leadership.†

*A minimum of 120 credits (Total ASN and BSN Major Program Credits + General Education Credits + Servant Leadership) is required for a baccalaureate degree. General Education Core requirements required for the RN to BSN degree can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed above may fulfill general education requirements.

† Students may take Bio Statistics concurrently with RN to BSN courses to satisfy requirement post admission.

‡ The RN to BSN program requires students to maintain a current and unrestricted RN license throughout the entirety of this program. Students will be dismissed from the program if their RN license is suspended, surrendered, or revoked. Upon the reinstatement of their RN license, a student would be considered for re- admission to the RN to BSN program given the criteria outlined above.

40	Licensed RN – Prior Learning Credit
44	Anatomy w/ Lab* Physiology w/ lab* Microbiology * Introductory Psychology * Introductory Sociology* Mercy Health Sciences University baccalaureate core requirements**

	Gen Education electives
3	Biostatistics
3	Servant Leadership
30	Nursing Major
120	Total Credits for BSN Degree

*Required for program admission
**All general education requirements, except Biostatistics and Servant Leadership must be completed prior to the start of nursing courses.

Articulation Options

- Mercy Health Sciences University serves as a sending institution (ASN Degree) and a receiving institution (RN to BSN degree) in the Iowa Articulation Plan for Nursing Education.
- Iowa Board of Nursing policies of the Iowa Articulation Plan for Nursing Education: RN to BSN will be followed.
- At the time of admission to the RN to BSN major, one of the two options outlined in the articulation plan is declared. A plan of study is developed for each student in consultation with an academic advisor, and credit is awarded according to the option.

Nursing Program Dismissal (RN-BSN)

- Please refer to the Promotion Policy for students provided in the Academic Policies & Procedures Section above.

Graduation Requirements RN to BSN Degree

To receive the Bachelor of Science in Nursing Degree, students must meet the following requirements:

- Complete all requirements of the BSN degree.
- Complete all required nursing and arts and sciences courses with a grade of "C" or higher (not "C-").
- Satisfactorily complete the RN to BSN reflective essay.
- Satisfactorily complete the University Graduation Requirements.

RN to BSN Curriculum

General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Required Arts and Science Courses for the Major		
*BIO 180	Human Anatomy (w/Lab)	4 credits
*BIO 185	Human Physiology (w/Lab)	4 credits
*BIO 203	Microbiology	3 credits
*PSY 101	General Psychology	3 credits
*SOC 102	Sociology	3 credits
STA 165 or STA 330	Fundamentals of Statistics or Biostatistics	3 credits
SVL 285	Servant Leadership	3 credits
	General Electives	
Total General Education Credit Hours: 55		
Major Course Requirements		
*Nursing RN Coursework		
NSG 315	History and Trends in Nursing Practice	1 credit
NSG 404	Program Orientation and Professional Writing	1 credit
NSG 413	Holistic Nursing	3 credits
NSG 414	Advanced Health Assessment	3 credits
NSG 416	Information and Financial Management in Nursing	3 credits
NSG 418	Research and Evidence Based Practice	3 credits
NSG 425	Advocacy and Health Policy	3 credits
NSG 426	Genomics, Aging, and End of Life Care	3 credits
NSG 481	Community Health Nursing	4 credits
NSG 483	Theories of Leadership and Management	3 credits
NSG 485	BSN Professional Nursing Practice	3 credits
Total Credits Nursing RN to BSN Coursework: 30		
Total RN to BSN Degree Credits: 120		

*Included in 66 credits articulated from the Associate Degree (39 credits Nursing and 27 credits Arts and Sciences.) *Students with fewer than 66 credits of transferable nursing courses can use electives to meet the credit deficit.*

Recommended Course Sequence		
Semester I, 1st 8 weeks		
NSG 404	Program Orientation and Professional Writing	1 credit
NSG 414	Advanced Health Assessment	3 credits
Total Credit Hours: 4		
Semester I, 2nd 7 weeks		
NSG 413	Holistic Nursing	3 credits
NSG 426	Genomics, Aging, and End of Life Care	3 credits
Total Credit Hours: 6		
Semester II, 1st 8 weeks		
NSG 315	History and Trends in Nursing Practice	1 credit
NSG 418	Research and Evidence Based Practice	3 credits
Total Credit Hours: 4		
Semester II, 2nd 7 weeks		
NSG 483	Theories of Leadership and Management	3 credits

NSG 425	Advocacy and Health Policy	3 credits
Total Credit Hours: 6		
Semester III, 1st 8 weeks		
NSG 481	Community Health Nursing	3 credits
Total Credit Hours: 3		
Semester III, 2nd 7 weeks		
NSG 416	Information and Financial Management in Nursing	3 credits
NSG 485	BSN Professional Nursing Practice	3 credits
Total Credit Hours: 6		
SVL 285	Servant Leadership *May be taken at any point during the program (graduation requirement).	3 credits
Total RN to BSN Degree Credits: 120		

Physical Therapist Assistant

Purpose

The Associate of Science in Physical Therapist Assistant (ASPTA) Program is dedicated to providing high-quality educational opportunities where students develop the knowledge, skills, and attitudes necessary for entry-level employment as physical therapist assistants.

Outcomes

Upon completion of the Physical Therapist Assistant major, the graduate will be able to:

1. Demonstrate competence in psychomotor skills necessary to safely perform data collection procedures and physical therapy interventions under the supervision of a licensed physical therapist.
2. Effectively communicate verbally and nonverbally with patients/clients, families, supervising physical therapists, healthcare practitioners, and others.
3. Accurately document the patient/client encounter in a timely, legible, and concise manner.
4. Implement the established plan of care and make modifications within it as appropriate; consult with the physical therapist regarding changes in patient status.
5. Provide instruction to patients/clients, families, caregivers, peers, and others using techniques and materials, which match the characteristics of the individual group.
6. Collaborate with other members of the healthcare team to optimize patient outcomes.
7. Display behaviors which are within the recognized ethical and legal standards for the profession of physical therapy and consistent with the core values of Mercy Health Sciences University.
8. Demonstrate a commitment to professional development through participation in self-assessment and lifelong learning activities.

Admission Requirements

Program Eligibility and Prerequisites

To be considered for admission to the PTA major, applicants must be admitted to Mercy Health Sciences University (refer to the Admissions section) and meet the criteria below. Admission to the University does not guarantee admission to a major. Class size is limited.
Students who have earned a previous Bachelor's, Associate of Arts (A.A.), or Associate of Science (A.S.) degree are considered to have met all Mercy Health Sciences University Core requirements except for Servant Leadership.

1. Complete the program application.
13. Successful completion of program prerequisites prior to the technical portion of the program; must earn a grade of "C" (not C-) or higher in the following University-level courses • Human Anatomy (with lab) • Human Physiology (with lab) • Medical Terminology • English Composition I • Introduction to Psychology or Developmental Psychology • College-level Math (not Statistics).
2. Earn an extracted GPA of 2.8 or higher from the prerequisites listed above (Medical Terminology is not included in the GPA calculation).
3. All Mercy Health Sciences University Core requirements must be completed prior to beginning the PTA major except for SVL 285 Servant Leadership, and BIO 225 or 302 Pathophysiology.

4. Provide documentation of 24 hours of observation in physical therapy department(s) with a minimum of two levels of care (e.g. acute care hospital, skilled nursing facility, home health, and outpatient physical therapy clinic).
5. Participate in a required program informational session.

Program Admission Procedures
Applications are accepted at any time during the year. Class size is limited. The PTA Program uses rolling admissions. The admission committee reviews completed applications in the order in which they are received.

Application Deadlines

Applications for fall PTA admission must be received by the PTA program by June 30 for priority consideration. A required program information session is scheduled after program eligibility is verified and completion of observation hours. Following the session, applicants receive program status notification within two weeks.

After Admission to the Major

Once applicants have been notified of admission, the applicant must:

- Submit the Intent to Register form
- Submit background check documents and required immunizations through the College's approved clinical compliance database (speak with Program Chair or SSC Staff)
- Attend program orientation

Articulation of Transfer Credit to Physical Therapist Assistant

Applicants meeting admissions criteria who have completed physical therapist assistant courses at another institution may apply for transfer credit. The courses considered for transfer must have been completed no more than two years prior to the semester in which the student enrolls in the physical therapist assistant sequence at Mercy Health Sciences University. Courses considered for transfer must be completed at an accredited institution that also has program accreditation. The following will be considered in the approval of transfer credit:

1. Similarity of course content.
2. Evaluation of clinical competency by Mercy Health Sciences University faculty.
3. Transfer credits applied must have a grade of "C" or higher (not "C-").

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University Physical Therapist Assistant students. These abilities are based on the job requirements for Physical Therapist Assistant at MercyOne Des Moines Medical Center where clinical experiences may occur. Applicants must review the following clinical standards to determine their ability and compatibility with the physical requirements of a Physical Therapist Assistant.

Physical Activity Requirements

Constant

Balancing – Maintaining body equilibrium when walking, standing, or crouching while guarding patients and setting up equipment.
Reaching – Positioning equipment or patient during physical therapy interventions.
Standing and Walking – Most of the day while working with patients.
Talking – Giving patient instructions during exercise and gait training.

Hearing – Obtaining information from patient relative to response to interventions.
Repetitive Motions – As would occur during massage.

Frequent

Lifting – Patient transfers. Potentially in excess of 100 pounds.
Grasping – Manually assisting or resisting patient during exercise.
Feeling – Assessing muscle tone, palpating pulse, and assessing edema or inflammation.

Occasional

Climbing – Ascending and descending stairs, curbs, and ramps while guarding patients. Body agility is emphasized to prevent the patient from falling.
Stooping – Occurs when physical therapist assistant bends forward to adjust leg rests on wheelchairs and while assisting patients.
Kneeling – While assisting with mat to stretcher transfers and treating pediatric patients.
Crouching – To swing away wheelchair leg rests and assist patients with the movement of their legs.
Crawling – Primarily occurs during treatment of pediatric patient.
Pulling – Same as pushing.
Pushing – Assisting or resisting a patient during exercise; moving patient in wheelchair. Forces of 20-100 pounds.
Fingering – Use of computer terminal keyboard.

Physical Demand Requirements

Heavy clinical assignments – Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects. PTAs are required to assist in the transfer of patients who may weigh in excess of 300 pounds.

Visual Acuity Requirements

During clinical assignments, students are required to read the medical record, measure and record blood pressure and range of motion, and use computer terminal.

Intellectual/Emotional Requirements

Students must be able to:

- Accept responsibility for the direction, control, or planning of an activity (instructing patient in rationale for specific procedures and implementing physical therapy plan of care).
- Handle situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint (assessment of patients' ability to function safely in home environment).
- Influence people in their opinions, attitudes, or judgments about ideas or things (assisting patient in life-style adaptations made necessary by change in medical status).
- Make generalizations or decisions based on sensory or judgmental criteria (assessment of patient response to interventions).
- Communicate with people beyond giving and receiving instructions (discussion of patient progress and goals with healthcare team).
- Perform under stress when confronted with emergency, critical, unusual, or dangerous situations (patient becomes unresponsive during gait training sessions).
- Perform a variety of duties, often changing from one task to another of a different nature, without loss of efficiency or composure.

Tools/Equipment

- Mechanical and Electrical Therapy Equipment
- Lift Devices
- Whirlpools
- Phone/Fax
- Wheelchairs/Carts
- Computer and Printer
- Topical Heat/Cold
- Exercise equipment
- Varied Ambulation Aids

Clinical Conditions

- Students are subject to frequent exposure to communicable diseases, toxic substances, ionizing radiation, medicinal preparations and other conditions common to a clinical environment.
- Students are subject to environmental conditions: Protection from weather conditions, but not necessarily from temperature changes (transit to patient's home for home visit, activities of daily living training outside).
- Students are subject to noise: There is sufficient noise to cause the worker to shout in order to be heard above the ambient noise level (e.g., whirlpool area, rehab gym).
- Students are subject to hazards: Includes a variety of physical conditions, such as proximity to moving mechanical parts, electrical current, and exposure to chemicals (wheelchairs, life mechanisms, chemicals used in cleaning).
- Students in a clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials, therefore, are included in the OSHA Exposure Control Plan with its specifications for preventing contact with the above materials.

Failed Course Policy for the PTA Program

Regarding progression in the program:

1. In order to be promoted to the next term, students must successfully complete all didactic courses with a grade of "C" or higher and clinical courses with a "pass" grade.
2. Students earning a grade of less than "C" at the end of term in one PTA didactic course have the opportunity to take a re-evaluation examination to demonstrate competency.
    - Students who do not successfully complete prerequisite coursework cannot progress.
3. Students who fail three or more courses in the major (regardless of retakes) will be dismissed from the major and must sit out for at least one semester before reapplying to any clinical major. Readmission is not guaranteed.
4. Students who are dismissed from the program may re-apply during the next admissions cycle.

Graduation Requirements ASPTA Degree

Student must meet the following requirements to receive an Associate of Science Degree in Physical Therapist Assistant:

- Successfully complete all general education and professional education courses in the curriculum plan with a grade of "C" or higher (not "C-").
- Complete the University residency requirement of 15 credit hours at the associate level.
- Successfully complete all skill competency exams.
- Successfully complete all clinical competencies.
- Satisfactorily complete the University Graduation Requirements.

The Physical Therapist Assistant Program at Mercy Health Sciences University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave., Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: www.capteonline.org. If needing to contact the program/institution directly, please call 515-643-6614 or email Connor.Schmitt@MCHS.edu.

ASPTA Curriculum

Some courses listed below may fulfill general education requirements. Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations. General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog.

Required Courses for the Major		Credits
BIO 180	Human Anatomy w/Lab	4 credits
BIO 185	Human Physiology w/Lab	4 credits
BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
ENG 101	English Composition I	3 credits
MAT 1##	College-level Math (not Statistics)	3 credits
MED 101	Medical Terminology	1 credit
PSY 202	Developmental Psychology	3 credits
PTA 101	Fundamentals of Physical Therapy (with lab)	3 credits
PTA 130	Kinesiology (with lab)	4 credits
PTA 135	Essential Skills in Physical Therapy I (with lab)	2 credits
PTA 137	Essential Skills in Physical Therapy II (with lab)	2 credits
PTA 160	Physical Therapy Modalities (with lab)	4 credits
PTA 162	Therapeutic Exercise (with lab)	4 credits
PTA 163	PTA Clinical I	1 credit
PTA 201	Physical Therapy Interventions for Musculoskeletal & Integumentary Conditions (lab)	3 credits
PTA 202	Physical Therapy Interventions for Neuromuscular & Cardiopulmonary Conditions (lab)	3 credits
PTA 204	Professional Issues	2 credits
PTA 230	Issues in Clinical Practice	1 credit
PTA 232	PTA Clinical II	6 credits
PTA 234	PTA Clinical III	6 credits
PTA 235	PTA Seminar	1 credit
Total Major Credits: 63		

Recommended Course Sequence		
General Education Semester I (Fall) 15 weeks		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
MAT 120	College Algebra	3 credits
MED 101	Medical Terminology	1 credit
PSY 101	General Psychology	3 credits
SPE 105	Small Group Communication	1 credit
Total Credit Hours: 15		
General Education Semester II (Spring) 15 weeks		
BIO 185	Human Physiology w/Lab	4 credits
ENG 102	English Composition II	3 credits
PSY 202	Developmental Psychology	3 credits
SVL 285	Servant Leadership	3 credits
	Humanities Elective (100 level or higher)	3 credits
Total Credit Hours: 16		
PTA Semester I (Fall) 15 weeks		

BIO 225 or 302	Principles of Pathophysiology or Pathophysiology	3 credits
PTA 101	Fundamentals of Physical Therapy (with lab)	3 credits
PTA 130	Kinesiology (with lab)	4 credits
PTA 135	Essential Skills in Physical Therapy I (with lab)	2 credits
PTA 137	Essential Skills in Physical Therapy II (with lab)	2 credits
Total Credit Hours: 14		
PTA Semester II (Spring) 8-week term* and 7-week term		
PTA 160*	Physical Therapy Modalities (with lab)	4 credits
PTA 162*	Therapeutic Exercise (with lab)	4 credits
PTA 163*	PTA Clinical I	1 credit
PTA 201	Physical Therapy Interventions for Musculoskeletal & Integumentary Conditions (lab)	3 credits
PTA 202	Physical Therapy Interventions for Neuromuscular & Cardiopulmonary Conditions (lab)	3 credits
PTA 204	Professional Issues	2 credits
Total Credit Hours: 17		
Semester III (Summer) 8-week term* and 7-week term		
PTA 230*	Issues in Clinical Practice	1 credit
PTA 232*	PTA Clinical II	6 credits
PTA 234	PTA Clinical III	6 credits
PTA 235	PTA Seminar	1 credit
Total Credit Hours: 14		
Total ASPTA Degree Credits: 76		

Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration, Bachelor of Public Health, or Bachelor of Science in Health Science at Mercy Health Sciences University.

Public Health

Purpose

The Bachelor of Science degree in Public Health (BSPH) is designed to educate undergraduates interested in public health and/or health profession training in the broad basic concepts in public health education, practice, and research. The primary focus of public health education is to improve health and quality of life through population-based prevention and treatment of disease.

Outcomes

1. Analyze how cultural, social, behavioral, and environmental factors impact population health.
2. Analyze the impact that current state and federal regulations have on public health practice.
3. Evaluate patterns of morbidity and mortality in population data through epidemiological methods.
4. Design comprehensive public health change interventions and programs.
5. Interpret the effectiveness of public health programs and services through the review of evidence-based literature/research studies.
6. Relate how the core disciplines of public health impact the current health status of specific populations.

Admission Requirements

For admission to the Bachelor of Science in Public Health (BSPH) major, applicants must be admitted to Mercy Health Sciences University (See University Admissions section) and indicate Public Health as their first-choice major on the admission application.

After Admission to the Major

1. Schedule and attend an online orientation*.
2. Apply for financial aid.
3. Register for first semester of classes.
4. Provide any necessary documentation for required practicum course – PBH 465 may require you to provide the following information to a preceptor/facility. If you have any concerns about providing this information, please let the Program Chair know by the end of the first semester in the major:
    - National Certified Background Check
    - Proof of immunizations including current TB
    - Health Insurance Portability and Accountability Act (HIPAA) Agreement Form
    - Proof of a flu shot, if required by practicum site

Graduation Requirements BSPH Degree

Students must meet the following requirements to receive a Bachelor of Science degree in Public Health

- Completion of all required courses with a "C" or higher in all courses (not a "C-").
- Complete 30 credit hours at Mercy Health Sciences University; of which, 15 credits must be at the 300/400 level
- Complete all coursework within six years of admission into the program

- Successfully complete all practicum requirements
- Complete the Public Health Capstone Portfolio
- Satisfactorily complete the University Graduation Requirements

Public Health Minor (see Academic Minor Section)

BSPH Curriculum

The following curriculum plan could be followed to complete the program requirements for the degree program, if all core requirements had already been met. General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.
Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

General Core Curriculum: 41 Credits		
Some Courses below may fulfill general education requirements		
	Required Courses for the BSPH Major	
BIO 100	Fundamentals of Biology for Health Professionals (or equivalent)	3 credits
CHE 100	Chemistry for Health Professionals (or equivalent)	3 credits
PBH 180	Introduction to Public Health	3 credits
PBH 260	Environmental Health	3 credits
PBH\HCA 301	Healthcare Delivery in the United States	3 credits
PBH\HCA 303	Healthcare Economics	3 credits
SVL 285	Servant Leadership	3 credits
STA 330	Biostatistics	3 credits
PBH 285	Public Health Disaster Preparedness and Emergency Management	3 credits
PBH 315	Global Health Issues	3 credits
STA 420	Research Methodologies	3 credits
EPI 340	Epidemiology	3 credits
PBH 385	Public Health Assessment and Evaluation	3 credits
PBH 410	Public Health Policy and law	3 credits
PBH 415	Public Health Advocacy	3 credits
PBH 425	Public Health Program Planning and Health Promotion	3 credits
PBH 440	Grant Writing	3 credits
PBH 460	Practicum (1 credit didactic 1 credit Practicum (45hrs)	2 credits
PBH 495	Capstone	1 credit
	Total Course Program Credit hours:	**45 credits**
	Electives	**34 credits**
Total BSPH Degree Credits		**120 credits**

Course sequence could vary depending on student enrollment status: Students should meet with the BSPH Program Chair to develop a curriculum plan for completing the degree.

Public Health Minor

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Public Health Minor Coursework: must take PBH 180 and then 15 additional credits		
EPI 340	Epidemiology	3 credits
PBH 180	Intro to Public Health	3 credits
PBH 260	Environmental Health	3 credits
PBH 285	Public Health Disaster Preparedness and Emergency Management	3 credits
PBH 315	Global Health Issues	3 credits
PBH 385	Public Health Assessment and Evaluation	3 credits
PBH 410	Public Health Policies and Law	3 credits
PBH 415	Public Health Advocacy	3 credits

PBH 440	Grant Writing	3 credits
PBH 425	Public Health Program Planning and Health Promotion	3 credits
Total Credit Hours: 18		

Radiologic Technology

Purpose

The Radiologic Technology Program is dedicated to educating students in the art and science of medical imaging through an integrated program of arts and sciences courses and hospital and clinic-based professional education. Guided by the mission of Mercy Health Sciences University, and in compliance with the Joint Review Committee on Education in Radiologic Technology the primary purpose is to facilitate the personal and professional development of students. Therefore, the program provides the knowledge, skills, and attitudes needed to care for the sick and injured, produce quality diagnostic images, protect self and others from unnecessary radiation exposure, and pursue life-long learning.

Goals

1. Educate students to be effective communicators.
   Student Learning Outcomes – students will be able to:
   - Effectively communicate through oral methods
   - Effectively communicate through written methods
2. Educate students to be effective critical thinkers and problem solvers.
   Student Learning Outcomes – students will be able to:
   - Provide appropriate care in response to emergency/trauma situations
   - Accurately evaluate radiographic images
3. Educate students to be technically skilled in order to provide quality patient care while protecting patients, self, and others from unnecessary ionizing radiation.
   Student Learning Outcomes – student will be able to:
   - Accurately manipulate radiographic equipment
   - Accurately position patients
   - Correctly set radiographic techniques
   - Correctly use radiation protection methods
   - Provide quality patient care
4. Encourage students in their professional development and pursuit of lifelong learning.
   Student Learning Outcomes – students will be able to:
   - Develop a Personal Philosophy on professionalism
   - Demonstrate professional behaviors in the clinical area
5. Meet the needs of the community.
   Student Learning Outcomes:
   - Students entering the major will complete the major
   - Graduates who take the ARRT National Board Examination within six months of graduation will pass on the first attempt
   - Graduates will be satisfied with the education in the major
   - Employers will hire graduates
   - Of those seeking employment in radiology, graduates will be employed within six months of graduation

Outcomes

Upon completion of the Radiologic Technology major, the graduate will demonstrate the following behaviors:

1. Demonstrate caring relationships through personal integration of the core values of Mercy.
2. Function within recognized ethical and legal standards.

3. Apply principles of critical thinking and problem-solving skills in the technical performance of medical imaging procedures based on knowledge of anatomy, physiology, patient positioning, and radiographic techniques.
4. Provide patient and public education in radiographic exam preparations, expectations, and post procedure care.
5. Utilize radiation protection techniques and devices to maintain radiation exposure "As Low As Reasonably Achievable (ALARA)" for the patient, self, and others.
6. Demonstrate competence and scholastic excellence to competently and accurately perform a full range of radiologic procedures on a patient.
7. Modify radiographic procedures to accommodate for changes in patient conditions, technical factors, types of equipment, contrast media utilized, and other variables.

The Radiologic Technology major at Mercy Health Sciences University provides students with the academic and clinical experience needed to become caring, ethical, and competent radiographers. Students acquire the knowledge, skills, and attitudes needed to safely utilize radiation to perform diagnostic radiographic examinations through the use of patient positioning procedures and state-of-the-art equipment.

Upon satisfactory completion of all graduation requirements for the Rad Tech Degree the student will be awarded the Associate of Science in Radiologic Technology Degree from Mercy Health Sciences University.

The graduate may apply to take the National Registry Examination given by the American Registry of Radiologic Technologists. In the state of Iowa, a Permit to Practice is required in order to perform radiographic procedures. In the state of Ohio, a Radiologic License is required in order to perform radiographic procedures. Information concerning application for the ARRT's Registry Examination, Iowa's Permit to Practice, and Ohio's Radiologic License is provided prior to graduation.

The maximum number of hours spent in class and in clinical does not exceed 40 hours per week.

Admission Requirements

To be considered for admission to the Radiologic Technology major, applicants must be admitted to Mercy Health Sciences University *(see Admissions section)* and meet the criteria listed below. Admission to the University does not guarantee admission to a major.

1. First-time University Students:
    - Earn a cumulative GPA of 2.8 on high school transcripts, and
    - Minimum ACT composite score of 20 or higher.
    - Demonstrate completion of one year of high school with a grade of at least a 2.0 ("C" not "C-") on a 4.0 scale in each of these required college level courses: Human Anatomy (w/ lab), Human Physiology (w/ lab), Medical Terminology, English Composition I, College-Level Math (College Algebra or Higher, not Statistics).
    - Required prerequisites must be completed and all documents submitted with the application by January 31st. Admission to the major is contingent upon successful completion of all courses in progress with a "C" (not "C-") or better.
2. Transfer Students:
    - Earn a cumulative GPA of 2.8 or higher on a 4.0 scale at the last college attended (minimum of 9 credits).
3. A short writing assignment will be required of each applicant by January 31st.
4. Admission into the major is on a competitive basis. Meeting the minimum criteria does not guarantee admission into the major. Admission into Mercy Health Sciences University also does not guarantee admission into the major. Early application is encouraged. After the enrollment class is full, students qualified for admission will be placed on an alternate list.

Students who are not admitted into the major must re-apply for the following year. Students may find it helpful to complete liberal arts and sciences courses at Mercy Health Sciences University prior to admission to the major.

5. A short writing assignment will be required of each applicant before January 31.

Application Deadlines

- Applications for the RT major must be received by the RT program by January 31 for consideration. Admission to the University may be completed earlier, but no later than January 31.
- Admission to the RT major will be announced after March 1st.
- Admission into this major is on a competitive basis. Meeting the minimum criteria does not guarantee admission into this major. Admission into Mercy Health Sciences University also does not guarantee admission into this major. Early application is encouraged. After the enrollment class is full, students qualified for admission will be placed on an alternate list. Students from the alternate list will be added to the summer enrollment class on a space available basis. Students who are not admitted into the major may re-apply to the major for the following year. Students may find it helpful to complete arts and sciences courses at Mercy Health Sciences University prior to admission to the major.
- **Note** – Eligibility for registration by the American Registry of Radiologic Technologists (ARRT) following graduation may be restricted if a person has been convicted of a felony or has an abuse record. Students with questions should contact the ARRT (651-687-0048) to inquire about eligibility prior to beginning classes in the rad tech major. Students should also contact the Admissions Department prior to admission if their eligibility is in question.
- Fees and other costs required to make application for the ARRT examination, the Iowa Permit to Practice, and Ohio Radiologic Licensure are the responsibility of the graduate. Information regarding these costs is provided to the student during the last semester of the major and upon request.

Articulation of Transfer Credit to Radiologic Technology

Applicants meeting admissions criteria who have completed radiologic technology courses at another institution may apply for transfer credit. The courses considered for transfer must have been completed no more than two years prior to the semester in which the student enrolls in the radiologic technology sequence at Mercy Health Sciences University. Courses considered for transfer must be completed at an accredited institution that also has program accreditation. The following will be considered in the approval of transfer credit:

1. Similarity of course content.
2. Placement exams will be administered by the Program Chair to verify knowledge and clinical skills prior to accepting transfer credit.
3. Evaluation of clinical competency by Mercy Health Sciences University faculty.
4. Availability of space in the appropriate radiologic technology course.
5. Transfer credits applied must have a grade of "C" or higher (not C-").

Clinical Standards

The following clinical standards are required of Mercy Health Sciences University Radiologic Technology students. These abilities are based on the job requirements for Radiographers at MercyOne Des Moines Medical Center where most clinical experiences will occur, but also apply to other clinical sites established by the RT program. Applicants must review the following clinical standards to determine their ability and compatibility with the physical requirements of Radiologic Technology.

Physical Activity Requirements
Constant

- Talking and Hearing – while exchanging information both in person and by phone.
- Lifting, Kneeling, Bending, Standing, Pushing and Pulling – while delivering direct patient care or utilizing equipment.

Frequent

- Sitting – while preparing educational activities, working on computer, etc.

Physical Demand Requirements

- Heavy clinical assignment – Students may exert up to 100 pounds of force occasionally, and/or up to 40 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

Visual Acuity Requirements

- During clinical assignments, students are required to prepare and read written documentation, use a computer and use peripheral vision.

Intellectual/Emotional Requirements

Students must be able to:

- Maintain a high standard of courtesy and cooperation in dealing with colleagues, patients, and visitors and satisfactory performance despite the stress of a hospital work environment.
- Adapt to perform a variety of duties, often changing from one task to another without loss of efficiency or composure.
- Perform in situations requiring set limits, standards and adherence to established guidelines.
- Perform under stress when confronted with emergency, critical, or unusual situations.
- Accept the responsibility for the direction, control, and planning of an activity.
- Influence people in their opinions, attitudes, or judgments about ideas or things.
- Make generalizations, evaluations or decisions based on measurable or verifiable criteria; i.e. patient assessment and equipment performance.

Tools/Equipment

- Standard imaging equipment include, but not limited to, all types of computers, video systems, power equipment, and also the use of phone and written materials.

Clinical Conditions

- Students are subject to inside environmental conditions.
- Students are subject to noise from various types of imaging equipment.
- Students are subject to electrical, radiant energy, and processor chemistry hazards.
- Students in a clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious materials and, therefore, are included in the OSHA Exposure Control Plan with its specifications to prevent contact with the above materials.

Graduation Requirements Rad Tech Degree

Student must meet the following requirements to receive an Associate of Science in Radiologic Technology Degree:

- Successfully complete all arts and sciences and professional education courses in the curriculum plan with a grade of "C" or higher (not "C-").
- Complete the University residency requirement of 15 credit hours at the associate level.
- Successfully complete all skill competency exams.
- In order for the University to certify to a federal, state or local government agency or professional licensing organization that a student has completed the degree, the student must meet all graduation requirements, complete all financial aid entrance and exit counseling requirements and fully satisfy all financial obligations owed to the University.
- Satisfactorily complete the University Graduation Requirements.

Policies

Pregnancy Policy & Procedure

The Radiologic Technology Program has adopted the following policy in regard to activities of pregnant radiography students in the clinical affiliate setting.

1. The pregnant student is strongly encouraged to declare herself pregnant as early in the pregnancy as possible. Voluntary declaration must be made to the program director and clinical coordinator jointly. The declaration will also be made in writing, using a form supplied by the program director. The pregnant student may also rescind a declaration of pregnancy at any time, this also needs to be in writing.
6. The declared pregnant student will cooperate with the observation of proper radiation safety practices.
7. Adoption of the guidelines for occupationally exposed pregnant students identified in the NCRP Report "During the entire gestation period, the absorbed dose equivalent to the fetus from occupational exposure of the expectant mother should not exceed 5.0mSv (500 millirem)." The student will be provided, free of charge, a second dosimeter to be worn at the abdomen.
8. Upon written request of the pregnant student, the pregnant student radiographer is expected to meet all other objectives and clinical competencies of each radiography course. Any time missed from clinical education or classes will be subject to the attendance policy for that course.
9. The student also has the option of continuing in the program without modifications.

In addition upon declaration of pregnancy, the Compliance Officer or designee will:

- Discuss radiation safety
- Provide regulatory guidelines
- Review past radiation exposure and the accumulation through gestation
- Calculate fetal dose when necessary or upon request

RAD 101 is a foundations class that the students complete before going to clinical. In this class this policy is discussed in detail and the practice of ALARA is discussed. The pregnancy policy and practice of ALARA are reviewed and discussed in subsequent semesters.

Radiation Safety/Protection Policy

The Iowa Department of Public Health (IDPH) requires that an employee is considered a radiation worker if their dose exceeds 10% of the MPD (maximum permissible dose) of 5000 mrem/year. In accordance with state guidelines for maintaining radiation exposure "As Low As Reasonably Achievable (ALARA)", Mercy Health Sciences University, in collaboration with Mercy Medical Center, strives to assure student exposure during clinical rotations stays under 5000 mrem/year. The action levels established in Mercy Medical Center's ALARA program is 400 mrem/quarter which is below the state regulated limit of 1250 mrem/quarter. The Allied Health program chairs provide students with information about protecting themselves, patients,

patient's families, and the health care team. Information is provided prior to assignments to clinical rotations. Students in Radiologic Technology, and other Allied Health programs, if applicable, receive and are required to wear a radiation monitoring badge(s) at all times when at clinical rotations. The badge(s) is to be worn as instructed and will be provided by the University at no cost to the student.

- The Radiation Safety Officer (RSO) reviews radiation monitoring badge reports.
- If a student's exposure exceeds 400 mrem in one calendar quarter, the student receives a letter, is counseled, receives a second monitoring badge, and exposure is recorded by the RSO.
- Monthly radiation monitoring badge reports are delivered to the program chair. The report is then taken to class by the program chair or Rad Tech faculty for the students to review their individual report. Each student will be given their individual report, the chair or instructor will review how to interpret the report. After all questions have been answered, the student will sign the current badge report.
- MercyOne has a Radiation Safety Committee, this committee meets on a quarterly basis. The Rad Tech Program Chair is a member of this committee.
- Coursework covers information on radiation monitoring devices and radiation protection in greater detail.

To assure student and patient safety:

- Students must not hold image receptors during any radiographic procedure.
- Students should not hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.
- While making exposures, the door to the room must be closed.
- Students are encouraged to use all imaging aids available to assist the patient to maintain or hold the position necessary for the projection.
- In the rare occasion that these devices would not achieve optimal results, it is the responsibility of the radiographer to find an individual to assist in holding.
- The health physicist reviews radiation monitoring badge reports. In the event a student's badge report exceeds the Iowa Department of Public Health safety levels, as adopted by the Radiation Safety Committee, the student receives a letter from the committee chair documenting the exposure. Depending on the dose level, the student may be required to wear an additional radiation monitoring badge.
- Coursework covers information on radiation monitoring devices and radiation protection in greater detail.
- Gonadal shielding-Based on the recent research pertaining to the use of gonadal shielding during abdominal and pelvic radiography and the longstanding practice in radiography to only shield in instances in which diagnostic quality will not be compromised, the JRCERT has concluded that routine use of gonadal shielding for abdominopelvic radiography exams should not be standard practice for clinical radiography students when the use of such could interfere with the diagnostic quality of the exam and may result in the risk of a repeat exposure.

Rad Tech Curriculum

All students must complete the General Education Core requirements. General Education Core requirements can be found in the Academic Policies and Procedures section of the Catalog. Some courses listed below may fulfill general education requirements.

Required Courses for the Major		Credits
*BIO 180	Human Anatomy w/Lab	4 credits
*BIO 185	Human Physiology w/Lab	4 credits
RAD 101	Foundations of Radiologic Imaging	2 credits
RAD 104	Principles of Radiologic Imaging	2 credits

RAD 110	Applied Radiography I	3 credits
RAD 111	Clinical Practicum I	2 credits
RAD 114	Principles of Radiologic Imaging II	2 credits
RAD 116	Imaging Systems	3 credits
RAD 120	Applied Radiography II	3 credits
RAD 121	Clinical Practicum II	2 credits
RAD 130	Applied Radiography III	2 credits
RAD 131	Clinical Internship III	5 credits
RAD 202	Radiographic Pathology	3 credits
RAD 203	Advanced Patient Care	2 credits
RAD 205	Radiation Physics	3 credits
RAD 210	Applied Radiography IV	2 credits
RAD 211	Clinical Practicum IV	3 credits
RAD 215	Radiation Biology	3 credits
RAD 220	Applied Radiography V	3 credits
RAD 221	Clinical Practicum V	3 credits
Total Major Credits: 56		

*Can be taken ahead of time, in the recommended semester or later (if approved by their advisor).

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

Recommended Course Sequence*		
Semester I (Summer)		
MAT ###	MAT Elective (College Algebra or higher level of math, not statistics)	3 credits
RAD 101	Foundations of Radiologic Imaging	2 credits
RAD 104	Principles of Radiologic Imaging	2 credits
RAD 110	Applied Radiography I	3 credits
Total Credit Hours: 10		
Semester II (Fall)		
BIO 180	Human Anatomy w/Lab	4 credits
ENG 101	English Composition I	3 credits
RAD 111	Clinical Practicum I	2 credits
RAD 114	Principles of Radiologic Imaging II	2 credits
RAD 120	Applied Radiography II	3 credits
SVL 285	Servant Leadership	3 credits
Total Credit Hours: 17		
Semester III (Spring)		
BIO 185	Human Physiology w/Lab	4 credits
ENG 102	English Composition II	3 credits
RAD 116	Imaging Systems	3 credits
RAD 121	Clinical Practicum II	2 credits
RAD 130	Applied Radiography III	2 credits
	Social Science Elective	3 credits
Total Credit Hours: 17		
Semester IV (Summer)		
RAD 131	Clinical Internship III	5 credits
SPE 105	Small Group Communication	1 credit

Total Credit Hours: 6		
Semester V (Fall)		
RAD 202	Radiographic Pathology	3 credits
RAD 203	Advanced Patient Care	2 credits
RAD 205	Radiation Physics	3 credits
RAD 210	Applied Radiography IV	2 credits
RAD 211	Clinical Practicum IV	3 credits
Total Credit Hours: 13		
Semester VI (Spring)		
RAD 215	Radiation Biology	3 credits
RAD 220	Applied Radiography V	3 credits
RAD 221	Clinical Practicum V	3 credits
	Core Elective	3 credits
	Humanities Elective	3 credits
Total Credit Hours: 15		
Total Rad Tech Degree Credits: 78		

*RAD classes have to be taken in the semester that is recommended. All RAD classes in each semester are co-requisites of each other.
Students in this associate degree may pursue the Bachelor of Science in Healthcare Administration or Bachelor of Science in Health Science at Mercy Health Sciences University.

Academic Minors

Biomedical Research Minor

Chemistry Minor Coursework:		
BIO 320	Genetics	4 credits
BIO 360	Immunology	3 credits
BIO 400	Pathogenic Microbiology	3 credits
BIO 460	Cell and Molecular Biology	3 credits
STA 420	Research Methodology	3 credits
STA 470	Advanced Research	3 credits
Total Credit Hours: 19		

Chemistry Minor

Chemistry Minor Coursework:		
CHE 101	General Chemistry I (w/Lab)	4 credits
CHE 102	General Chemistry II (w/Lab)	4 credits
CHE 320	Organic Chemistry	4 credits
CHE 321	Organic Chemistry II	4 credits
CHE 420	Biochemistry (w/Lab)	4 credits
Total Credit Hours: 20		

Healthcare Administration Minor

Healthcare Administration Minor Coursework: must take HCA 301 and then 15 additional credits		
HCA 301	Healthcare Delivery in the United States – A Consumer Perspective	3 credits
Select 15 credits from the following courses:		
HCA 303	Healthcare Economics	3 credits
HCA 304	Human Resources Management in Healthcare	3 credits
HCA 305	Principles of Management in Healthcare	3 credits
HCA 320	Marketing Strategies in Healthcare	3 credits
HCA 324	Information Resources in Healthcare	3 credits
HCA 404	Legal/Ethical Aspects of Healthcare	3 credits
HCA 405	Leadership Strategies in Healthcare	3 credits
HCA 415	Healthcare Financial Management	3 credits
HCA 420	Practicum I	3 credits
HCA 412	Long Term Care: Organization and Administration	3 credits
HCA 413	Hospitals: Organization and Administration	3 credits
HCA 414	Ambulatory Care Services: Organization and Administration	3 credits
HCA 416	Data Interpretation and Project Management	3 credits
HCA 417	Self-Awareness and the Effective Leader	3 credits
Total Credit Hours: 18		

Human Services Minor

Human Services Minor Coursework:		
PSY 180	Introduction to Human Services (required)	3 credits
PSY 325	Techniques of Individual /Group Counseling (required)	3 credits
	Choose an additional 12 credits from the following courses:	
PSY 365	Human Services Field Experience	3 credits
PSY 240	Gerontology and Aging	3 credits
PSY 303	Abnormal Psychology	3 credits
PSY 410	Social Psychology	3 credits
SOC 360	Death, Dying and Bereavement	3 credits
SOC 415	Social Justice Approach to Social Issues	3 credits
Total Credit Hours: 18		

Public Health Minor

Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite associations.

Public Health Minor Coursework: must take PBH 180 and then 15 additional credits		
EPI 340	Epidemiology	3 credits
PBH 180	Intro to Public Health	3 credits
PBH 260	Environmental Health	3 credits
PBH 285	Public Health Disaster Preparedness and Emergency Management	3 credits
PBH 315	Global Health Issues	3 credits
PBH 385	Public Health Assessment and Evaluation	3 credits
PBH 410	Public Health Policies and Law	3 credits
PBH 415	Public Health Advocacy	3 credits
PBH 440	Grant Writing	3 credits
PBH 425	Public Health Program Planning and Health Promotion	3 credits
PBH 460	Practicum	2 credits
PBH 495	Capstone	1 credit
Total Credit Hours: 18		

Center for Continuing Education

Purpose

The Mercy Health Sciences University Training Center is located in the lower level of the ACE Building and houses Continuing Education, AHA, and EMS programs. Geared towards healthcare professionals and interested community members, the Center offers a variety of continuing education courses both online and on-campus. The Director of the Training Center coordinates these efforts and is available throughout the week for academic guidance and support.

Course Offerings

ACLS Instructor
This course is designed to provide the ACLS Instructor with information about how to teach the ACLS provider courses. The class includes orientation to AHA materials as well as mock class scenarios to enhance classroom management techniques. Time: 3.5 hours.

ACLS Provider
A combination of video segments, and hands-on skills stations provides students with the knowledge and skills necessary to act effectively and efficiently. Critically ill patients with cardiovascular emergencies require rapid intervention to enhance the patient's chances of surviving a cardiac arrest or pre-arrest situation. ACLS class includes management of common arrhythmias, pharmacology, airway management, and electrical therapy for arrhythmias. Time: 4.5 hours.

Advanced Emergency Medical Technician (AEMT)
The Advanced Emergency Medical Technician (AEMT) certificate is a course where the EMT will expand his/her knowledge, skills, and abilities. The course focuses on emergency care but has content covering medical and traumatic emergencies, adult and pediatric patients, acute and chronic medical conditions, intravenous therapy, and pharmacology. Students must complete 48 hours of clinical rotations in the Emergency Department where they are permitted to work with a variety of patients while having an opportunity to observe several healthcare disciplines. Students also participate in 72 hours of field internship as a member of an EMS crew responding to 911 calls. Classes are taught by leading professionals in the field. Upon completion of the course with a 78% or higher and all requirements, the student will be eligible to partake in the NREMT Psychomotor examination and the NREMT Cognitive examination. Time: 15 weeks of class sessions.

Basic Life Support (BLS) Provider - Initial Course
This course is the CPR course designed for healthcare providers and professional rescuers. The class meets the requirements for CPR certification and for renewal of CPR certification for employees working in the healthcare industry. This is also the required CPR course for students studying to become healthcare providers. Successful completion requires satisfactory scores on a written certification exam and satisfactory performance of all skills evaluations. Time: 4 hours.

Certified Nursing Assistant (CNA) Course
This is a 3-week course that will prepare the student to take the required state exam to become a Certified Nursing Assistant (CNA), a trained professional who serves as an assistant to Licensed Practical Nurses (LPNs) and Registered Nurses (RNs). The student will learn information and skills that will allow him/her to assist in providing basic care to the patients as well as understanding what pertinent information to relay to the nurses in charge, including changes in behavior

and/or condition. The student will be prepared to function in all levels of long-term care facilities and hospitals providing direct patient care. Responsibilities may vary slightly from long-term care facilities to acute care facilities, with this course preparing the student to provide CNA services in both types of healthcare agencies. Participants in the CNA course will learn necessary information from assigned readings and class discussions, then practice related skills of patient care in the lab environment before entering a clinical practice setting to apply their knowledge and skills. Typically, students are required to have a minimum of 75 hours to sit for licensure.

Community Health Worker Certificate (CHW-103)
The Community Health Worker certificate program is designed for working professionals employed across a broad spectrum of jobs and professions. It is a 10-week course, offered 100% online. The program is uniquely designed to respond to the increasing demand for healthcare professionals to identify and support the nation's growing health challenges. With a behavioral/mental health emphasis, learners are trained in crisis prevention and intervention and gain a broader understanding of the ethnic and racial disparities that lead to chronic disease, mental illness, and social determinants of health.

CPR Instructor
This course prepares the participant to teach First Aid and CPR. Instructor credentials earned from this course allow the participant to teach First Aid, BLS, Heartsaver/AED, Heartsaver CPR/AED/First Aid, and Family and Friends CPR. To become an American Heart Association (AHA) Cardiopulmonary Resuscitation (CPR) Instructor the student must first hold a current, American Heart Association provider certification in the discipline that she or he wishes to teach (Heartsaver or Basic Life Support). Unless you plan on teaching CPR to healthcare providers and professional rescuers, most schools tend to go with the Heartsaver Instructor certification. Students must have a current provider certification in the discipline for which they want to become an instructor. If the student wants to teach both BLS and Heartsaver classes, then she or he must have a current AHA BLS Provider certification. Time: 8.5 hours.

Emergency Medical Technician (EMT)
This course is intended to prepare a student as a competent, entry level, Emergency Medical Technician (EMT). This includes all skills necessary for the individual to provide emergency medical care at a basic life support (BLS) level with an ambulance service or other specialized services. As part of the course, students will complete a clinical internship in a hospital emergency department and will participate as an "extra" crew member on actual EMS ambulance calls. Upon successful completion of this course, the EMT student will take the National Registry of Emergency Medical Technicians' (NREMT) Psychomotor (hands-on skills) Exam and the NREMT Cognitive Written Exam. Time: 15 weeks of class sessions.

HeartCode BLS Part 2 Skills Lab
This course is designed for students who have already taken the BLS Provider-Initial Course and need to recertify their BLS Provider. Students who have never taken a BLS Provider course should register instead for the BLS Provider-Initial Course. The location of skills labs can vary. Time: 1.5 hours.

Heartsaver Total First Aid/CPR/AED Provider (Adult/Child/Infant)
The Heartsaver Total First Aid/CPR/AED Provider course is an OSHA-compliant class which provides instruction in CPR/AED and principles of First Aid for non-healthcare providers. It is ideal for workplace responders and lay-rescuers. Topics include care for trauma incidents (injuries) and medical incidents (cardiac arrest, seizures, and shock) for adults, children, and infants. This course requires a textbook present during class time. Textbooks can be ordered online from American Heart Association or at worldpoint.com. Time: 8 hours.

PALS Instructor
This course is designed to provide the PALS Instructor with information about how to teach the PALS Provider course. The class includes orientation to AHA materials as well as mock class scenarios to enhance classroom management techniques. The PALS Instructor Essentials course must be completed online prior to this course. Students should bring a copy of the PALS Instructor Essentials course completion certificate—as well as a copy of their current PALS Provider card. Students must also have an PALS Instructor Manual for class, which can be purchased through American Heart Association. Time: 5.5 hours.

PALS Provider
A combination of video segments and hands-on skills stations provides students with the knowledge and skills necessary to act effectively and efficiently in life support situations. Critically ill patients with cardiovascular emergencies require rapid intervention to enhance the patient's chances of surviving a cardiac arrest or pre-arrest situation. ACLS class includes management of common arrhythmias, pharmacology, airway management, and electrical therapy for arrhythmias. This course requires a 2020 Provider Manual and a pre-course assessment to be completed prior to class. Per the American Heart Association, proof of completion of the pre-course assessment must be brought to class by the student. Time: 16 hours.

PALS Renewal
A combination of video segments, and hands-on skills stations provides students with the knowledge and skills necessary to act effectively and efficiently in life support situations. Critically ill patients with cardiovascular emergencies require rapid intervention to enhance the patient's chances of surviving a cardiac arrest or pre-arrest situation. ACLS class includes management of common arrhythmias, pharmacology, airway management, and electrical therapy for arrhythmias. This course requires a 2020 Provider Manual and a pre-course assessment to be completed prior to class. Per the American Heart Association, proof of completion of the pre-course assessment must be brought to class with you. Time: 8 hours.

Course Descriptions

Prerequisites are courses that must be taken and successfully completed prior to the indicated course.
Corequisites are courses that are taken at the same time as the indicated course according to the Curriculum Plan.

Special Departmental Courses

Capstone Course 295 (1-3 cr)
Capstone is a course of study usually taken in the final year. The student will demonstrate that they have achieved the goals for learning established by the institution and major of study. The course is designed to assess cognitive, affective and psychomotor learning in a student-centered and student-directed manner which requires the command, analysis and synthesis of knowledge and skills. The course fosters interdisciplinary partnerships among departments and helps cultivate industry coalitions and collaboratives. Achievements may be demonstrated by a written paper of significance, a major project, engaging in a research project, doing field experience and giving a presentation before an academic panel of professors and student peers.
Capstone Course 495 (1-3 cr)
Capstone is a course of study usually taken in the final year. The student will demonstrate that they have achieved the goals for learning established by the institution and major of study. The course is designed to assess cognitive, affective and psychomotor learning in a student-centered and student-directed manner which requires the command, analysis and synthesis of knowledge and skills. The course fosters interdisciplinary partnerships among departments and helps cultivate industry coalitions and collaboratives. Achievements may be demonstrated by a written paper of significance, a major project, engaging in a research project, doing field experience and giving a presentation before an academic panel of professors and student peers.
Cooperative Education 296 (1-3 cr)
This course allows eligible students to have the opportunity to earn University credit while working as employees or volunteers. Application Form must be completed with consultation between the student, the Program Chair, and Dean of Liberal Arts and Sciences and be submitted to the Registrar with appropriate signatures. A student must have completed 15 credit hours at the University and hold a cumulative GPA of 2.5 or higher. Students must be degree- seeking at Mercy Health Sciences University. Grading is on a pass/fail basis.
Cooperative Education 496 (1-3 cr)
This experience allows eligible students to have the opportunity to earn University credit while working as employees or volunteers. Application Form must be completed with consultation between the student, the Program Chair, and Dean of Liberal Arts and Sciences, and be submitted to the Registrar with appropriate signatures. A student must have completed 15 credit hours at the University and hold a cumulative GPA of 2.5 or higher. Students must be degree-seeking at Mercy Health Sciences University. The experience must meet expected rigor and student learning outcomes expected for this level of experience. Grading is on a pass/fail basis.
Independent Studies 297 (1-6 cr Contact time is determined by the type of experience outlined.)
Independent Study provides the student with an opportunity to pursue or explore a subject in more depth and with much less instructor supervision than is customary in a traditional face-to-face course. Students must be sophomore status (30 or more completed semester hours), have completed 15 credit hours at the University, and hold a cumulative GPA of 2.5 or higher. Independent Study Application Form must be completed with consultation between the student and the instructor, be approved and signed by the Program Chair and Dean of Liberal Arts and Sciences, and then be submitted to the Registrar with appropriate signatures.

Independent Studies 497 (1-6 cr Contact time is determined by the type of experience outlined.)
Independent Study provides the student with an opportunity to pursue or explore a subject in more depth and with much less instructor supervision than is customary in a traditional course. Students must be upper-division status (60 or more completed semester hours), have completed 15 credit hours at the University, and hold a cumulative GPA of 2.5 or higher. Independent Study Application Form must be completed with consultation between the student and the instructor, be approved and signed by the Program Chair and Dean of Liberal Arts and Sciences, and then be submitted to the Registrar with appropriate signatures.

Special Research Projects 498 (1-6 cr Contact time is determined by the type of experience outlined.)
Special Research Projects are designed for students who have reached senior status and have been identified by a Mercy Health Sciences University faculty sponsor to collaborate with them on a research project. Students must have accumulated 90 credit hours, be in good standing with the University, academic major, and have a cumulative GPA of a at least 3.0 to participate in a research project for credit. Faculty must identify the project description, objectives, student learning outcomes, assignments, all guidelines by which a student will be assessed, and a project calendar. Special Research Project outlines must follow appropriate research standards; meet expected levels of rigor for the credit hours, type of work, and level of major assigned.

Special Topics 299 (1-6 cr Contact time is determined by the type of experience outlined.)
Special Topics courses address current developments or special-interest topics in an aspect of the larger subject taught by the major or school at the associate degree level. Faculty must identify the course description, objectives, student learning outcomes, assignments, all guidelines by which a student will be assessed, and a course calendar. The rigor of instruction and expected student learning outcomes must be commensurate with the level of the course, the type of course, and credit hours assigned.

Special Topics 499 (1-6 cr Contact time is determined by the type of experience outlined.)
Special Topics courses address current developments or special-interest topics in an aspect of the larger subject taught by the major or school at the baccalaureate degree level. Faculty must identify the course description, objectives, student learning outcomes, assignments, all guidelines by which a student will be assessed, and a course calendar. The rigor of instruction and expected student learning outcomes must be commensurate with the level of the course, the type of course, and credit hours assigned.

General and Professional Education Courses

BHS 300 Practicum I (2 cr)
This course offers the opportunity to integrate, apply and be exposed to professions in the healthcare organization during a 0 45 hour practicum. Student, faculty member and preceptor will mutually agree on area of study and practicum setting. Mode of delivery: web. 1 lecture hour, 1 practicum hour (45 contact hours with preceptor). Spring and Summer semesters.

BHS 400 Practicum II (2 cr)
This course offers a second opportunity to integrate, apply and be exposed to professions in the healthcare organization during a 45 hour practicum. Student, faculty member and preceptor will mutually agree on area of study and practicum setting. PREREQUISITE: BHS 300. Mode of delivery: web. 1 lecture hour, 1 practicum hour (45 contact hours with preceptor). Spring and Summer semesters.

BHS 450 Professional Preparation in Health Sciences (2 cr)
This course focuses on the tools and resources necessary to prepare for a career in the health sciences or admission into graduate school. Students will have the opportunity to meet with a career advisor, create professional resumes and cover letters, prepare for certification exams, and benefit from guest speakers within the human resources field and graduate school

admissions. Mock interviews will also be held with local employers. PREREQUISITE: Approval of course instructor or Program Chair. Mode of delivery: web. 2 lecture hours. Summer semester.

BHS 465 Health Assessment (3 cr)
Course Description: This course focuses on health assessment, health promotion, and disease prevention for major health concerns of individuals throughout the life span. Emphasis will be placed on introductory development of a health history and health risk profile and to perform physical assessment of client of varying ages. Evidence-based screening tests for early detection of disease, immunizations and prophylaxis to prevent disease and counseling to modify risk factors that lead to disease will be explored. Mode of delivery: face-to-face. 3 lecture hours. Summer semester.

BIO 100 Fundamentals of Biology for Health Professionals (3 cr)
This course is an introductory life science course that helps students understand biological processes related to health. It examines ecological principles, cell structure and function, photosynthesis, metabolism, cell reproduction, genetics, reproduction and development. The course incorporates lecture and content related assignments. There is no lab with this course. Mode of delivery: Web based. 3 lecture hours.

BIO 101 General Biology I (with Lab) (4 cr)
Explores fundamental principles and concepts of Biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. The laboratory component emphasizes lecture topics and includes studying invertebrate and vertebrate organisms and includes studying invertebrate and vertebrate organisms. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Fall semester.

BIO 102 General Biology II (with Lab) (4 cr)
This course is the second course in a two-semester sequence designed to stress the principles of biology. Life processes are examined primarily at the organismal and population levels. PREREQUISITE: BIO 101. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Spring semester.

BIO 130 Principles of Microbiology (with Lab) (4 cr)
This course in an investigation into the role of microorganisms in nature with a particular emphasis on human/microbial interactions. Basic concepts and practical applications of microbiology in medicine, immunology, and epidemiology will be explored. Mode of delivery: web-based. 3 lecture hours, 2 laboratory hours. Spring semester. May not meet major requirements.

BIO 137 Foundations of Anatomy & Physiology I (3 cr)
Foundations of Anatomy and Physiology I establishes the structure and function of the human body. Foundational concepts begin with the cellular level including chemistry, cell structure, and cell metabolism. Histology of the human body is studied. The organ systems studied are the integumentary system, skeletal system, muscular system, nervous system and special issues. This course does not include a lab. Mode of delivery: web-based. 3 lecture hours. Fall semester.

BIO 138 Foundations of Anatomy & Physiology II (3 cr)
Foundations of Anatomy and Physiology II integrates the organ systems of the human body in maintaining homeostasis. The organ systems covered are endocrine, lymphatic, cardiovascular, respiratory, urinary, digestive, and reproductive. Metabolism, body fluids, and acid/base

balance are studied. This course does not include a lab. PREREQUISITE: BIO 137. Mode of delivery: web-based. 3 lecture hours. Spring semester. Spring semester.

BIO 180 Human Anatomy (with Lab) (4 cr)
This course offers basic concepts in human anatomical structures. It includes all major body systems with emphasis on histological, developmental and gross anatomy. The accompanying lab will reinforce lecture through animal dissection and human prosection. PREREQUISITE: One year of high school biology or equivalent. Mode of delivery: face-to-face, web-based. 3 lecture hours, 2 laboratory hours. Fall, Spring, and Summer semesters.

BIO 181 Human Anatomy Lab (1 cr)
This is a lab-based course that reinforces previously learned concepts in human anatomy through the use of animal dissection and human pro-section. Concepts to be discussed include all major body systems. PREREQUISITES: 3 credit didactic human anatomy course. Mode of delivery: face-to-face, 2 laboratory hours. As needed.

BIO 185 Human Physiology (with Lab) (4 cr)
This course studies detailed human physiology of the nervous system (CNS, PNS, Special Senses, Autonomic Nervous System, and Somatic Nervous System.) It studies cellular physiology, cardiovascular, blood, lymphatic, circulatory, respiratory, muscle physiology, digestive, urinary, reproductive, and endocrine systems. It also teaches the balances that must occur in the human body in fluid/acid base/energy/temperature. The accompanying lab will reinforce lecture through hands-on experimentation. PREREQUISITE: BIO 180. Mode of delivery: face-to-face, web-based. 3 lecture hours, 2 laboratory hours. Fall, Spring, and Summer semesters.

BIO 186 Human Physiology Lab (1 cr)
This lab reinforces lecture material from a Human Physiology course though hands-on experimentation. This course will cover labs pertaining to cellular physiology, acid-base disorders, and muscle physiology. It will cover nervous (CNS, PNS, Special Senses), reproductive, cardiovascular, respiratory, urinary, and digestive systems. Experiments are performed in the laboratory to illustrate functional characteristics of cells, membranes, and organ systems and to provide direct experience with lab techniques, recording systems and methods of data analysis. PREREQUISITES: 3 credit didactic human physiology course. Mode of delivery: web-based, 2 laboratory hours. As needed.

BIO 203 Microbiology (with Lab) (4 cr)
This course is designed to convey general concepts, methods, and applications of medical microbiology. Topics include: immunology, bacteriology, virology, and mycology; the morphology, biochemistry, and physiology of microorganisms including bacteria, viruses, and fungi; the diseases caused by these microorganisms and their treatments; and the immunologic, pathologic, and epidemiological factors associated with diseases. PREREQUISITE: One year of high school biology or equivalent. Mode of delivery: face-to-face, web-based. 2.5 lecture hours, 3 laboratory hours. Fall, Spring, and Summer semesters.

BIO 225 Principles of Pathophysiology (3 cr)
This course provides a foundation for the understanding of the physiological disruptions associated with injury or disease. This course includes information related to the causes and manifestations of various pathophysiologic processes at the molecular, cellular, and organ system levels. PREREQUISITE: BIO 137, BIO 138; BIO 180, BIO 185 (Any University-level, two course Anatomy and Physiology series). Mode of delivery: face-to-face, web-based, web-assisted. 3 lecture hours. Fall, Spring, and Summer semesters.

BIO 302 Pathophysiology (3 cr)
This course presents a study of the etiology, pathogenesis, and manifestations of common

conditions and dysfunctions seen in healthcare. PREREQUISITES: BIO 180, BIO 185 or consent of the instructor. Mode of delivery: face-to-face, web-based. 3 lecture hours. Summer semester.

BIO 320 Genetics (with Lab) (4 cr)
An introduction to molecular genetics and to the basic principles of inheritance. Gene interactions, multiple-factor inheritance, chromosome inheritance, chromosome mapping, chromosomal and extra chromosomal inheritance. The roles of mutation, selection, migration, and genetic drift are investigated to determine the genetic composition of different populations. PREREQUISITES: BIO 101, 102. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Spring semester.

BIO 360 Immunology (3 cr)
This course will explore the basic science and clinical aspects of immunology, the study of the immune system. Basic immunology will cover topics such as innate immunity, inflammation, antigen-antibody reactions, lymphocyte activation, process of antibody production, and immunoregulation. Clinical topics will include host defense against infectious disease, hypersensitivity reactions, transplantation, autoimmune disease, immunodeficiencies, immunology of HIV infection, and vaccines. PREREQUISITE: BIO 203. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall semester.

BIO 400 Pathogenic Microbiology (with Lab) (3 cr)
This course is designed as a study of medically important microorganisms. Emphasis is placed on the morphological and physiological properties of clinically significant pathogenic organisms and their relation to disease in humans. This course also includes mechanisms of pathogenesis, epidemiology, collection and transport of specimens, initial specimen processing, and identification of isolates by classical, automated and molecular techniques. PREREQUISITES: BIO 203, 302. Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours. Summer semester.

BIO 410 Advanced Anatomy (with Lab) (4 cr)
The gross human anatomy course provides an in-depth study of the human body using cadaveric dissection. PREREQUISITES: BIO 180, 185. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Fall semester.

BIO 450 Histology and Embryology (with Lab) (4 cr)
This course will study microscopic anatomy dealing with the structures of cells, tissue and organs in relation to their functions and emphasize the embryologic development of the human body, the relationship between body structure and function, and the use of gross human anatomy in physical diagnosis. PREREQUISITE: Approval of Program Chair. Mode of delivery: face-to-face, web-based. 3 lecture hours, 2 laboratory hours. Spring Semester.

BIO 460 Cell and Molecular Biology (3 cr)
This course is an introduction to the physical and chemical organization of living organisms; cell structure, function, and metabolism; classical and molecular genetics; gene regulation; genetic engineering; molecular aspects of development; and reproduction. PREREQUISITES: BIO 101, 102, 320. Mode of delivery: web-based. 3 lecture hours. Summer semester.

CHE 100 Chemistry for Health Professionals (3 cr)
This introductory course contains principles of general, organic, and biological chemistry. This course provides the theoretical foundations of chemistry relevant to the health sciences. Topics in this course include: problem solving, unit conversions, the features of the periodic table, the properties of atoms and molecules, ionic and covalent compounds, chemical reactivity, acids and bases, electrolytes and nonelectrolytes, radioactivity, functional groups of organic molecules, and structures and functions of biomolecules, such as proteins and enzymes.

PREREQUISITE: None. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

CHE 101 General Chemistry I (with Lab) (4 cr)
This course teaches basic principles of general chemistry with an emphasis on topics that are particularly related to health sciences. This course explores chemical phenomena and principles with a heavy emphasis on developing an understanding of chemical structures and chemical bonding. Topics include solubility, concentration units and stoichiometry, nomenclature, atomic structure, the periodic table, chemical bonding, acids and bases, liquids and solids, gas laws, and solutions. The accompanying lab will reinforce lecture through experimentation. Students will acquire skills in handling chemical phenomena and principles and in manipulating mathematical formulations which describe the behavior of various chemical systems. Mode of delivery: face-to-face, web-based, web-based. 3 lecture hours. 2 laboratory hours. Fall semester.

CHE 102 General Chemistry II (with Lab) (4 cr)
This course is the continuation of CHE 101 (General Chemistry I). This course will expose the student to basic principles of general chemistry with an emphasis on topics that are particularly related to health sciences. This course explores chemical kinetics and chemical equilibrium. It will cover advanced topics in acids and bases, particularly acid-base equilibria and solubility equilibria. Thermodynamics, particularly entropy, free energy, and their relationship to equilibrium will be explored. This course will also introduce the students to nuclear chemistry, organic chemistry, and electrochemistry. Topics in synthetic and natural organic polymers will also be covered. The accompanying labs will reinforce lecture through hands-on experimentation. Students will acquire skills in handling chemical phenomena and principles and in manipulating mathematical formulations which describe the behavior of various chemical systems. PREREQUISITE: CHE 101. Mode of delivery: face-to-face. 3 lecture hours. 2 laboratory hours. Spring semester.

CHE 320 Organic Chemistry I (with Lab) (4 cr)
This course is the first semester organic chemistry. This course will expose the student to basic principles of organic chemistry with an emphasis on topics that are particularly related to health sciences. This course explores electronic structure and bonding of organic molecules. It will cover topics in acids and bases, organic nomenclature, alkenes and alkynes, and reactions of alkenes and of alkynes. Stereochemistry will be explored in detail. This course will also introduce the students to delocalized electrons and resonance. Topics in substitution and elimination reactions will also be covered. Students will also be introduced to the basic functional groups of organic compounds. The accompanying labs will reinforce lecture through hands-on experimentation. Students will acquire skills in handling chemical phenomena and principles and in three-dimensional structures of molecules. PREREQUISITES: CHE 101, 102. Mode of delivery: face-to-face. 3 lecture hours. 2 laboratory hours. Fall semester.

CHE 321 Organic Chemistry II (with Lab) (4 cr)
This course is the second semester organic chemistry. In this course, students will be exposed to basic principles of organic chemistry with an emphasis on topics that are particularly related to health sciences. Students will the organic chemistry of carbonyl compounds and will study topics in oxidation and reduction reactions of carbonyl compounds, amines and heterocyclic compounds, amino acids and peptides and proteins, catalysis, and the organic chemistry of coenzymes. In addition to examining the details of metabolic pathways, students will be introduced to lipids, to nucleic acids, and to synthetic polymers. Students will also explore pericyclic reactions and the organic chemistry of drug discovery and design. The accompanying labs will reinforce lecture through hands-on experimentation. Students will acquire skills in handling chemical phenomena and principles and in three- dimensional

structures of molecules. PREREQUISITES: CHE 101, 102, 320. Mode of delivery: face-to-face. 3 lecture hours. 2 laboratory hours. Summer semester.

CHE 420 Biochemistry (with Lab) (4 cr)
In this course, students will be exposed to basic principles of biochemistry with an emphasis on topics that are particularly related to health sciences. Students will explore amino acids and the primary structures, three dimensional structures, and functions of proteins. Students will also study topics in properties and mechanisms of enzymes, coenzymes, vitamins, carbohydrates, and lipids. In addition, students will study metabolism, including metabolism of lipid, amino acid, and nucleotide. Other topics that will be covered include glycolysis, gluconeogenesis, electron transport, ATP synthesis, and the citric acid cycle. In addition to examining the details of photosynthesis, students will be introduced to nucleic acids, DNA replication, repair, recombination, transcription, RNA processing, and protein synthesis. The accompanying labs will reinforce lecture through hands-on experimentation and introduce students to literature reading. Students will acquire skills in handling chemical phenomena and principles and in three-dimensional structures of molecules. PREREQUISITES: CHE 101, 102, 320. Mode of delivery: face-to-face. 3 lecture hours. 2 laboratory hours. Spring semester.

DMS 101 Foundations of Ultrasound (3 cr)
This course is an introduction to the profession of Diagnostic Medical Sonography, its history, future, professional and accrediting organizations, and the relationship between the sonographer and the patient. Incorporated is information on role participation within the healthcare team, ethical and legal principles, patient care techniques, OSHA requirements, and universal precaution procedures and regulations. Modern issues in healthcare are discussed. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120 or STA 165, PHY 101 or 100 Level Physics. COREQUISITES: DMS 103, DMS 107, and DMS 115 for Cardiovascular or DMS 101, DMS 103, DMS 111, and DMS 116 for Ab/ObGyn. Mode of delivery: web-assisted. 3 lecture hours. Fall semester.

DMS 103 Ultrasound Physics I (2 cr)
This course provides fundamental principles of ultrasound physics and instrumentation. The concepts essential to skilled diagnostic ultrasound imaging are correlated to the operating principles of ultrasound equipment. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120 or STA 165, PHY 101 or 100 Level Physics. COREQUISITES: DMS 101, (DMS 107, and DMS 115 for Cardiovascular or DMS 111, and DMS 116 for Ab/ObGyn). Mode of delivery: face-to-face. 2 lecture hours. Fall semester.

DMS 107 Cardiac Lab I (2 cr)
This course is designed to develop competence in the identification and manipulation of diagnostic ultrasound equipment. In addition, the student will begin basic imaging skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120, PHY 101. COREQUISITES: DMS 101, DMS 103, and DMS 115. Mode of delivery: face-to-face. 2 laboratory hours. Fall semester.

DMS 111 General Lab I (2 cr)
This course is designed to develop competence in the identification and manipulation of diagnostic ultrasound equipment. In addition, the student will begin basic imaging skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120 or STA 165, PHY 101 or 100 Level Physics. COREQUISITES: DMS 101, DMS 103, and DMS 116. Mode of delivery: face-to-face. 4 laboratory hours. Fall semester.

DMS 115 Applied Cardiac I (4 cr)
This course relates knowledge of cardiovascular anatomy and physiology to the principles of

ultrasound imaging. Cross-sectional cardiovascular anatomy is correlated with two-dimensional techniques. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120 or STA 165, PHY 101 or 100 Level Physics. COREQUISITES: DMS 101, DMS 103, DMS 107, and DMS 111. Mode of delivery: face-to-face. 4 lecture hours. Fall semester.

DMS 116 Applied General I (4 cr)
This course relates knowledge of Ab/ObGyn anatomy and physiology to the principles of ultrasound imaging. Cross-sectional anatomy is correlated with two-dimensional techniques. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120 or STA 165, and PHY 101 or 100 Level Physics. COREQUISITES: DMS 101, DMS 103, and DMS 111. Mode of delivery: face-to-face. 4 lecture hours. Fall semester.

DMS 117 Applied Cardiac II (3 cr)
This course furthers knowledge of cross-sectional anatomy and physiology as related to the principles of ultrasound imaging. Students will begin to relate the understanding of sonographic anatomy and physiology to imaging techniques and sonographic protocols. PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 107, and DMS 115. COREQUISITES: DMS 122, DMS 123 and DMS 125. Mode of delivery: face-to-face. 3 lecture hours. Spring semester.

DMS 118 Applied General II (3 cr)
This course furthers knowledge of cross-sectional anatomy and physiology as related to the principles of ultrasound imaging. In addition an introduction to pathology encountered in the clinical setting will be presented. Students will begin to relate the understanding of sonographic anatomy and physiology to imaging techniques and sonographic protocols. PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 111, and DMS 116. COREQUISITES: DMS 126, DMS 127 DMS 125. Mode of delivery: face-to-face. 3 lecture hours. Spring semester.

DMS 122 Cardiac Lab II (2 cr)
Laboratory experiences will reinforce lecture content and further the students' knowledge of scanning techniques. The students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 107, and DMS 115. COREQUISITES: DMS 117, DMS 123, DMS 125. Mode of delivery: face-to-face. 4 laboratory hours. Spring semester.

DMS 123 Cardiac Clinical II (1 cr)
This course introduces cardiac sonography students to other cardiac care areas of the hospital and clinic. These will take place at MercyOne/Iowa Heart Center. In addition, students perform observational rotations in a variety of diagnostic ultrasound settings and are introduced to basic departmental operations. Correlation of theory to practice is measured through attendance, affective competency evaluations, descriptive clinical logs, and the final challenge exam. PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 107, and DMS 115. COREQUISITES: DMS 117, DMS 122, DMS 125. Mode of delivery: face-to-face. 16 clinical hours. Spring semester.

DMS 125 Ultrasound Physics II (2 cr)
This course builds on Ultrasound Physics I and focuses on blood-flow dynamics and an examination of Doppler principles and waveform analysis. PREREQUISITES: BIO 185, DMS 101, DMS 103, (DMS 107 and DMS 115 for Cardiovascular or DMS 111 and DMS 116 for Ab/ObGyn). COREQUISITES: DMS 117, and DMS 122, DMS 123 for Cardiovascular or DMS 118, DMS 126, DMS 127 for Ab/ObGyn. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

DMS 126 General Lab II (1 cr)

Laboratory experiences will reinforce lecture content and further the students' knowledge of scanning techniques. The students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 111, and DMS 116. COREQUISITES: DMS 118, DMS 127, DMS 125. Mode of delivery: face-to-face. 4 laboratory hours. Spring semester.

DMS 127 General Clinical II (1 cr)
This clinical rotation introduces patient assessment techniques. In addition, the student will begin performing basic imaging competencies in the clinical setting. Correlation of theory to practice is measured through weekly manual check-offs, CEUs, professional skills evaluations, retention tests, technical competencies, and final challenge exam(s). PREREQUISITES: BIO 185, DMS 101, DMS 103, DMS 111, and DMS 116. COREQUISITES: DMS 118, DMS 125, DMS 126. Mode of delivery: face-to-face. 16 clinical hours. Spring semester.

DMS 129 Abdominal Vascular Lab (07B) (1 cr)
This lab applies knowledge of vascular anatomy, hemodynamics, and physiology to the principles of ultrasound imaging. Cross-sectional vascular anatomy is correlated with hands-on scanning techniques as it relates to abdominal vasculature. PREREQUISITES: DMS 124 or DMS 272. Mode of delivery: face-to-face. 4 lab hours.

DMS 133 Cardiac Clinical III (3 cr)
Students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will be introduced to procedures performed in progressive clinical environments. Correlation of theory to practice is measured through attendance, weekly manual check-offs, CEUs, professional skills evaluations, retention tests, technical competencies, and final challenge exam(s). Students will demonstrate an increasing degree of competence in the performance of cardiovascular techniques. PREREQUISITES: DMS 117, DMS 122, DMS 123, DMS 125. COREQUISITE: DMS 134, DMS 215. Mode of delivery: face-to-face. 16 clinical hours. Summer semester.

DMS 134 Cardiac Lab III (1 cr)
Laboratory experiences will reinforce lecture content and further the students' knowledge of scanning techniques. The students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: DMS 117, DMS 122, DMS 123, DMS 125. COREQUISITE: DMS 133, DMS 215 BIO 225 or 302. Mode of delivery: face-to-face. 2 laboratory hours. Summer semester.

DMS 137 General Clinical III (3 cr)
Students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will be introduced to procedures performed in progressive clinical environments. Correlation of theory to practice is measured through attendance, weekly manual check-offs, CEUs, professional skills evaluations, retention tests, technical competencies, and final challenge exam(s). This course builds on the knowledge, skills, and attitudes acquired in DMS 106 and DMS 121. Students will demonstrate an increasing degree of competence in the performance of abdominal and obstetric techniques. PREREQUISITES: DMS 118, DMS 125, DMS 126, DMS 127. COREQUISITES: DMS 138, DMS 216, BIO 225 or 302. Mode of delivery: face-to-face. 16 clinical hours. Summer semester.

DMS 138 General Lab III (1 cr)
Laboratory experiences will reinforce lecture content and further the students' knowledge of scanning techniques. The students will continue to demonstrate an increasing degree of speed and efficiency in their performance of skills. Correlation of theory to practice is measured through attendance, retention tests, and weekly assignments. PREREQUISITES: DMS 118, DMS 126, DMS 127, DMS 125. COREQUISITE: DMS 137, DMS 216, BIO 225 or 302. Mode of delivery: face-to-face. 2 laboratory hours. Summer semester.

DMS 209 Cardiac Clinical IV (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of echocardiography exams and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 134, DMS 215, and BIO 225 or 302. COREQUISITE: DMS 225. Mode of delivery: face-to-face. 24 clinical hours. Fall semester.

DMS 211 General Clinical IV (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of complete abdominal, OB, and gynecological exams, as well as, small parts and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 138, DMS 137, DMS 216, BIO 225 or 302. COREQUISITE: DMS 211, DMS 226. Mode of delivery: face-to-face. 24 clinical hours. Fall semester.

DMS 215 Applied Cardiac III (4 cr)
This course provides an overview of the basic aspects of cardiovascular related illness and its effects on the human system. Causes, symptoms, diagnosis, and treatments of disease are discussed. The effects of cardiovascular disease are correlated with changes seen on images obtained in the clinical setting. In addition, advanced imaging and Doppler techniques that will assist the physician in an appropriate diagnosis of cardiovascular disease are presented. PREREQUISITES: DMS 117, DMS 122, DMS 123, DMS 125. COREQUISITE: BIO 225 or 302, DMS 132, DMS 133. Mode of delivery: face-to-face. 4 lecture hours. Summer semester.

DMS 216 Applied General III (4 cr)
This course focuses on the skills needed to perform advanced imaging and invasive techniques, which will assist the physician in an appropriate diagnosis of disease. Causes, symptoms, evaluation methods, and diagnosis of disease are discussed. The effects of disease, and its sonographic appearance, are correlated with experiences in the clinical setting. PREREQUISITES: DMS 118, DMS 125, DMS 126, DMS 127. COREQUISITE: BIO 225 or 302, DMS 138, and DMS 137. Mode of delivery: face-to-face. 4 lecture hours. Summer semester.

DMS 225 Applied Cardiac IV (3 cr)
This course discusses advanced cardiovascular ultrasound pathologic analysis in areas such as

pediatric echo and stress echocardiography,. Techniques used in a progressive clinical environment will also be covered. In addition, contrast echocardiography and the future of ultrasound is presented. PREREQUISITES: BIO 225 or 302, DMS 133, DMS 134, DMS 215. COREQUISITE: DMS 209 or DMS 276. Mode of delivery: web-assisted. 3 lecture hours. Fall semester.

DMS 226 Applied General IV (3 cr)
This course discusses advanced Ab/ObGyn ultrasound techniques performed in a progressive clinical environment. PREREQUISITES: BIO 225 or 302, DMS 136, DMS 137, DMS 216. COREQUISITE: DMS 211 or DMS 274. Mode of delivery: face-to-face. 3 lecture hours. Fall semester.

DMS 230 Cardiac Clinical V (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of echocardiography exams. Correlation of theory to practice is measured through attendance, weekly manual checkoffs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 225 and DMS 209. COREQUISITE: DMS 233. Mode of delivery: face-to-face. 24 clinical hours. Spring semester.

DMS 231 General Clinical V (3 cr)
Students will demonstrate an increasing degree of speed and efficiency in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will be introduced to procedures performed in a progressive clinical environment. PREREQUISITES: DMS 226 and DMS 211. COREQUISITE: DMS 234. Mode of delivery: face-to-face. 24 clinical hours. Spring semester.

DMS 233 Cardiac Seminar (2 cr)
This course provides a comprehensive review prior to the ARDMS National Registry Examinations. PREREQUISITES: DMS 225, DMS 209/276. COREQUISITE: DMS 230/237, DMS 235. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

DMS 234 General Seminar (2 cr)
This course provides a comprehensive review prior to the ARDMS National Registry Examinations. PREREQUISITES: DMS 226. COREQUISITE: DMS 235. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

DMS 235 DMS Career Preparation (1 cr)
This course guides students in preparation for the career seeking process and provides a variety of ways to be successful within a health-related profession. PREREQUISITES: DMS 225/226. COREQUESITES: DMS 233/234. Mode of delivery: web-based. 1 lecture hour. Spring semester.

DMS 270 Vascular Lab I (2 cr)
This lab applies knowledge of vascular anatomy, hemodynamics, and physiology to the principles of ultrasound imaging. Cross-sectional vascular anatomy is correlated with hands-on scanning techniques. This course will be a prerequisite to continued application in Vascular Lab II. PREREQUISITES: DMS 215 or DMS 216. Mode of delivery: face-to-face. 4 lab hours. Fall semester.

DMS 271 Vascular Applied I (3 cr)
This course relates knowledge of vascular anatomy, hemodynamics, and physiology to the principles of ultrasound imaging. Cross-sectional vascular anatomy is correlated with two-dimensional techniques. Content builds upon normal structure and function to address disease

processes in the vascular system, including detection, assessment, and treatment. This course will be a prerequisite to continued application in Vascular Applied II. PREREQUISITES: DMS 215 or DMS 216. Mode of delivery: web-based. 3 lecture hours. Fall semester.

DMS 272 Vascular Lab II (08A) (1 cr)
This lab applies knowledge of vascular anatomy, hemodynamics, and physiology to the principles of ultrasound imaging. Cross-sectional vascular anatomy is correlated with hands-on scanning techniques. PREREQUISITE: DMS 270. Mode of delivery: face-to-face. 4 lab hours. Spring semester.

DMS 273 Vascular Applied II (2 cr)
This course relates knowledge of vascular anatomy, hemodynamics, and physiology to the principles of ultrasound imaging. Cross-sectional vascular anatomy is correlated with two-dimensional techniques. Content builds upon normal structure and function to address disease processes in the vascular system including detection, assessment and treatment. PREREQUISITE: DMS 271. Mode of delivery: web-based. 2 lecture hours. Spring semester.

DMS 274 General Vascular Clinical IV (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of complete abdominal, OB, and gynecological exams, as well as, small parts, vascular, and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 137. Mode of delivery: face-to-face. 24 clinical hours. Fall semester.

DMS 275 General Vascular Clinical V (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of competencies in exams, as well as, vascular and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 274. Mode of delivery: face-to-face. 24 clinical hours. Spring semester.

DMS 276 CardioVascular Clinical IV (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of echocardiography exams, as well as, vascular and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 133. Mode of delivery: face-to-face. 24 clinical hours. Fall semester.

DMS 277 CardioVascular Clinical V (3 cr)
Students will integrate patient history and physical findings to determine appropriate areas of interest for quality diagnostic exams. Students continue to develop and demonstrate an increasing degree of competence in their performance of skills related to critical thinking and problem solving in the clinical area. In addition, students will demonstrate an increasing degree of speed and competence in the performance of echocardiography exams, as well as, vascular and advanced examinations. Correlation of theory to practice is measured through attendance, lab participation, weekly manual check-offs, professional skills evaluations, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: DMS 276. COREQUESITES: DMS 233, DMS 235. Mode of delivery: face-to-face. 24 clinical hours. Spring semester.

EM 109 Emergency Medical Technician (6 cr)
This course is intended to prepare an entry level EMT to operate in the field. This includes all skills necessary for the individual to provide emergency medical care at a basic life support level with an ambulance service or other specialized services. Students will also complete a clinical internship in a hospital emergency department and will participate as an "extra" crew member on actual EMS calls as part of this course. Students who wish to complete this course for no University academic credit should register for EM0109. Mode of delivery: hybrid. 4 lecture hours, 4 laboratory hours, and 3 clinical hours. Fall, Spring, and Summer semesters.

EM 270 Critical Care Paramedic (6 cr)
Students enrolled in this course are seeking national certification as a critical care paramedic, flight paramedic, certified flight registered nurse, or Iowa endorsement as a Critical Care Paramedic. Through a combination of didactic, lab, clinical internship, and field internship with an aeromedical transport service graduates are prepared to perform patient care skills for acutely ill and/or injured patients beyond the traditional role of a paramedic. Topics from the course include: flight physiology, hemodynamic monitoring, fetal heart monitoring, advanced pharmacology, and mechanical circulatory and ventilator support. PREREQUISITE: Current certification at the NREMTP or Iowa Paramedic Specialist level.
NOTE: Course is also open to students who have current licensure as a Registered Nurse or Registered Respiratory Therapist. Mode of delivery: hybrid. 4 lecture hours, 2 laboratory hours. Fall, Spring, and Summer semesters.

EMS 110 Foundations of Paramedic Practice I (4 cr)
This course provides the student with information regarding the role of the advanced pre-hospital care provider. This course is designed to provide the student with a framework of information to guide their actions as a future paramedic. Medicolegal and ethical issues in patient care, therapeutic communication, documentation, and the EMS role in public health are included in this class. PREREQUISITE: EMS 089 or EMS 109 or Current EMT certification, or Advanced EMT certification. COREQUISITES: EMS 111, EMS 112, EMS 113, EMS 114. Mode of delivery: face-to-face or synchronous online. 4 lecture hours. Fall semester.

EMS 111 Foundations of Paramedic Practice II (3 cr)
This course will provide information on structural human anatomy and physiology. The student will learn assessment of normal physiologic functions and how aging and/or the presence of disease can alter those functions. Basic principles of pharmacology such as drug legislation, drugs and chemical classes, and pharmacodynamics will also be introduced in this course. PREREQUISITE: EMS 089 or EMS 109 or EMT Basic/EMT Certification; COREQUISITES: EMS 110, EMS 112, EMS 113, and EMS 114. Mode of delivery: face-to-face. 3 lecture hours. Fall semester.

EMS 112 EMS Skills Lab I (2 cr)
This course offers students simulated patient practice in demonstrating the concepts and understanding of the roles and responsibilities of a paramedic, pharmacology, medication administration, venous access and airway management. Student skill competencies are validated during this course in preparation for actual patient encounters. COREQUISITES: EMS 110, EMS 111, EMS 113, and EMS 114. Mode of delivery: face-to-face. 4 skills lab hours. Fall semester.

EMS 113 EMS Clinical I (2 cr)
This introductory course offers students actual patient practice in demonstrating the concepts and understanding of the roles and responsibilities of a paramedic. This course focuses on mastery of Basic Life support skills and acquisition of Advanced Life Support skills through observation and performance under the direct supervision of a Preceptor. Medication Administration, IV Therapy, and Airway Management are skills observed and performed by students during this course. Students participate in clinical rotations in the Emergency Department, Ambulatory Surgery, Surgery, Post Anesthesia Recovery and Respiratory Department. COREQUISITES: EMS 110, EMS 111, EMS 112, EMS 114. Mode of delivery: face-to-face. 6 clinical hours. Fall semester.

EMS 114 EMS Field Practicum I (1 cr)
This introductory course offers students actual patient practice in the Pre-Hospital arena. The students have opportunities demonstrate the concepts and understanding of the roles and responsibilities of a paramedic. This course focuses on mastery of Basic Life Support skills and acquisition of Advanced Life Support skills through observation and performance under the direct supervision of an EMS Preceptor. Medication Administration, IV Therapy, and Airway Management are skills observed and performed by students in this course. Mode of delivery: face-to-face. 3 field practicum hours. Fall semester.

EMS 130 Management of Medical Emergencies (4 cr)
This course offers students concepts and understanding of medical emergencies, involving body systems such as cardiovascular, endocrine, renal and respiratory systems. Prehospital management of those emergencies is covered as well. This course will also include infectious diseases, toxicology, hematology, and environmental conditions. PREREQUISITES: EMS 110, EMS 111, EMS 112, and EMS 113. COREQUISITES: EMS 131, EMS 132, EMS 133 and EMS 134. Mode of delivery: face-to-face. 4 lecture hours. Spring semester.

EMS 131 Management of Traumatic Emergencies (3 cr)
This course offers students concepts and understanding of traumatic emergencies, including prehospital management of those emergencies. This course will also include shock trauma resuscitation. PREREQUISITES: EMS 110, EMS 111, EMS 112, and EMS 113. COREQUISITES: EMS 130, EMS 132, and EMS 133. Mode of delivery: face-to-face. 3 lecture hours. Spring semester.

EMS 132 EMS Skills Lab II (1 cr)
This course offers students simulated patient practice in demonstrating the concepts and understanding of medical emergencies and traumatic emergencies, including pre-hospital management of those emergencies. Student's skill competencies are validated during this course in preparation for actual patient encounters. PREREQUISITES: EMS 110, EMS 111, EMS 112, and EMS 113. COREQUISITES: EMS 130, EMS 131, and EMS 133. Mode of delivery: face-to-face. 2 skills lab hours. Spring semester.

EMS 133 EMS Clinical II (2 cr)
This course offers students actual patient practice in demonstrating the concepts and understanding of medical emergencies, including pre-hospital management of those

emergencies. This course also focuses on disease pathophysiology and the continuum of care from the pre-hospital environment to the patient discharge from the Hospital. Students participate in clinical rotations in the Emergency Department, Coronary Care Unit, Intensive Care Unit, Surgical/Trauma Intensive Care Unit, and Cardiac Catheterization Lab. PREREQUISITES: EMS 110, EMS 111, EMS 112, and EMS 113; COREQUISITES: EMS 130, EMS 131, and EMS 132. Mode of delivery: face-to-face. 6 clinical hours. Spring semester.

EMS 134 EMS Field Practicum II (2 cr)
This course offers the student actual patient practice in the pre-hospital arena. Students enrolled in this course will observe and perform patient assessments, observe and perform advanced life support skills, and will participate in the implementation of treatment plans for patients on EMS calls under the direct supervision of an EMS Preceptor. EMS Team member dynamics, communication, use of resources and documentation will also be included in this course. Mode of delivery: face-to-face. 96 field hours. Spring semester.

EMS 160 Care of Special Populations (3 cr)
This course offers students concepts and understanding of patients who have or present with special needs and/or considerations. This course will include obstetrics, pediatrics and neonatology, assessment-based management, and abuse and assault. PREREQUISITES: EMS 130, EMS 131, EMS 132, and EMS 133. COREQUISITES: EMS 161, EMS 162, and EMS 163. Mode of delivery: face-to-face or synchronous online. 3 lecture hours. Summer semester.

EMS 161 EMS Operations (3 cr)
This course offers students concepts and understanding of ambulance operations and incident command. This course will also include rescue, HAZMAT, rural EMS, terrorism, and crime scene awareness. PREREQUISITES: EMS 130, EMS 131, EMS 132, and EMS 133. COREQUISITES: EMS 160, EMS 162, and EMS 163. Mode of delivery: face-to-face. 3 lecture hours. Summer semester.

EMS 162 Transition to EMS Team Leader (2 cr)
Students in this course will transition from their role as a team member to the team leader. The course will focus on the team leader role in directing an EMS crew during difficult EMS patient encounters such as critically ill or injured cardiac, trauma, or pediatric patients. Management of difficult scenes, delegating responsibilities, team dynamics and communication techniques will be covered as well. The Medical Director Interview and comprehensive testing requirements for exiting the Paramedic major are included as components of this course. PREREQUISITES: EMS 130, EMS 131, EMS 132, and EMS 133. COREQUISITES: EMS 160, EMS 161, and EMS 163. Mode of delivery: face-to-face. 4 lecture hours. Summer semester.

EMS 163 Clinical III (2 cr)
This course offers students actual patient practice in demonstrating the concepts and understanding of medical and/or traumatic emergencies affecting special populations such as pediatrics, obstetric patients and special needs patients. Students participate in clinical rotations in the Emergency Department, General Pediatrics Floor, Pediatric Emergency Department, Pediatric ICU, Neonatal ICU, Labor and Delivery. PREREQUISITES: EMS 130, EMS 131, EMS 132, and EMS 133. COREQUISITES: EMS 160, EMS 161, and EMS 162. Mode of delivery: face-to-face. 96 clinical hours. Summer semester.

EMS 164 Field Practicum III (2 cr)
Under the direct supervision of a preceptor, students enrolled in this course will function as an EMS team leader. Students will also perform patient assessments, formulate a treatment plan, and provide patient care according to physician orders. Other aspects of EMS operations and the role of the EMS team leader will be performed by the student as well. EMS field internship

requirements are completed in this course. Mode of delivery: face-to-face. 96 field practicum hours. Summer semester.

ENG 101 English Composition I (3 cr)
Students will focus on the writing process including prewriting, drafting, revising, and editing. This course also addresses the basic elements of composition including organizing ideas for paragraphs and larger units of writing, and employing logic, evidence, and persuasion. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

ENG 102 English Composition II (3 cr)
Continued practice in the writing process, with assignments that teach students to deliberate on issues and ideas and present carefully reasoned, well-supported, and documented arguments in support of their opinions. Course includes strategies of persuasion and analysis, research, methods of documentation, and other discourse conventions of University writing. Students will learn to formulate questions, gather information, analyze sources and properly acknowledge them, support assertions with strong and detailed evidence, and shape information, evidence, and tone to meet the demands of a specific context and reader. PREREQUISITE: ENG 101 or equivalent. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

ENG 225 Young Adult Literature and Medicine
This course approaches ethical, social, and psychological issues in healthcare by identifying and challenging concepts of the caregiver-patient relationships as depicted in Young Adult Literature. Critical study and evaluation of the genre will frame exploration from altering perspectives and in diverse social environments, historical contexts, and cultural surroundings. Emphasized skills include critical close-reading, research, and oral/written argument through class discussion, essays, and presentations. PREREQUISITE: ENG 101 or equivalent. Mode of delivery: face-to-face, web-based. 3 lecture hours.

ENG 335 Literature and Medicine (3 cr)
This course approaches ethical, social, and psychological issues in healthcare by identifying and challenging concepts of the caregiver-patient relationship and of body as depicted in literary texts. Literature from various genres and a solid introduction to literary criticism will frame exploration of the caregiver-patient relationship from altering perspectives and in diverse social environments, historical contexts, and cultural surroundings. The course emphasizes skills of critical close-reading, research, oral and written argument through class discussion, essays, and presentations. PREREQUISITE: ENG 101. Mode of delivery: face-to-face, web-based. 3 lecture hours.

EPI 340 Epidemiology (3 cr)
Epidemiology is the method used to find the causes of health outcomes and diseases in populations. In epidemiology, the patient is the community and individuals are viewed collectively. The purpose of this course is to introduce students to epidemiological and biostatistical principles including concepts of rates, causation and disease surveillance. The role of health communications will be described in addition to selected tools of disease control and health promotion including interventions such as vaccinations, screening, counseling and education, environmental–occupational, legal, and policy approaches. Mode of delivery: web-based. 3 lecture hours. Summer semesters.

HCA 301 Healthcare Delivery in the United States – A Consumer Perspective (3 cr)
This course provides an overview of the nature, organization, and function of the continuum of health services found in the United States. Emphasis is placed on the interrelation of cultural,

economic, political, and social aspects of healthcare delivery at the federal, state, and local level. Topics include healthcare costs, accessibility of services, governmental influence on healthcare delivery, private industry role in healthcare, services for the medically indigent and elderly, ethical issues regarding transplants, reproductive technology, end of life decisions, and funding. CROSS-LISTED: PBH 301. Mode of delivery: web-based. 3 lecture hours. Fall semester.

HCA 303 Healthcare Economics (3 cr)
This course explores some of the major issues facing the healthcare industry and the effect that public policy and business environment has on a healthcare organization. Emphasis is on supply and demand theory, reimbursement systems, managed care, DRG prospective payment, insurance, Medicare, Medicaid, governmental regulations, accessibility, eligibility, budgeting, and planning. Students learn to use informational and research tools to make effective management decisions. CROSS-LISTED: MGT 303. Mode of delivery: web-based. 3 lecture hours. Fall semester.

HCA 304 Human Resources Management in Healthcare (3 cr)
This course analyzes human resources functions including recruitment, selection and retention strategies. Consideration is given to job satisfaction, design of work teams, job analysis, design, description and evaluation, collective bargaining, staffing, performance appraisal, employee discipline, management, and staff education. CROSS-LISTED: MGT 304. Mode of delivery: web-based. 3 lecture hours. Spring semester.

HCA 305 Principles of Management in Healthcare (3 cr)
This course combines classroom and clinical discussions/experiences to provide an overview of management functions including planning, organizing, directing, and controlling. It studies the basics of leadership communication, motivation, change theories, organizational culture, problem solving, conflict and negotiation, decision-making, productivity measurement, the TQM process, resource allocation, and mission and values development. CROSS-LISTED: MGT 305. Mode of delivery: web-based. 3 lecture hours. Spring semester.

HCA 320 Marketing Strategies in Healthcare (3 cr)
This course examines variables and techniques for marketing organizations. Topics include customer behavior, competition in the market, advertising, promotion, branding, customer satisfaction strategies, consumer satisfaction measurement and reporting. Mode of delivery: web-based. 3 lecture hours. Spring Semester.

HCA 324 Information Resources in Healthcare (3 cr)
This course explores the opportunities and challenges inherent in the use of healthcare management information systems in clinical and non-clinical applications. Subsystems include pathology, nursing, clinical laboratory, radiology, physiology, clinics, education, and financial management. CROSS-LISTED: MGT 324. Mode of delivery: web-based. 3 lecture hours. Summer semester.

HCA 404 Legal/Ethical Aspects of Healthcare (3 cr)
This course examines the contemporary application of legal and ethical issues involved in the management and delivery of healthcare services. Topics covered include contracts, torts, damages, negligence, risk management, patient rights, liability of hospital and staff for personal injury to patients, medical records and disclosure of patient information, informed consent, ethical billing and coding practices, medical staff credentialing, and ethical issues in healthcare. PREREQUISITE: 15 credit hours of HCA courses or approval of Chair of Healthcare Administration. CROSS-LISTED: MGT 404. Mode of delivery: web-based. 3 lecture hours. Fall semester.

HCA 405 Leadership Strategies in Healthcare (3 cr)
Are leaders born or made? What are the essential skills for leaders in the 21st century? This course will provide students with the opportunity to examine historical and current leadership theories, use critical thinking in case study scenarios, and discuss how servant leadership fits within the role of today's healthcare leaders. Emphasis is placed on the essential skills effective leaders must develop and implement, such as elaborating a mission, vision, and values, effectively communicating with culturally diverse individuals and teams, strategically managing an organization and facilitating change, overseeing finances, modeling legal/ethical behaviors, measuring leadership initiative outcomes, establishing mentorship responsibilities, and implementing succession planning. Students will examine their own leadership potential and develop a personal leadership philosophy. PREREQUISITE: 15 credit hours of HCA courses or approval of Chair of Healthcare Administration. Mode of delivery: web-based. 3 lecture hours. Summer semester.

HCA 412 Long Term Care: Organization and Administration (3 cr)
This course focuses on the complexities of managing nursing homes and other long term and chronic care facilities within the context of public financing constraints. Topics include governmental rules and regulations, reimbursement policies, gerontology and geriatrics, nutrition care continuum concept, facility, purchasing inventory, and financial analysis. PREREQUISITE: 15 credit hours of HCA courses or approval of Chair of Healthcare Administration. Mode of delivery: face-to-face. 3 lecture hours. Summer semester.

HCA 413 Hospitals: Organization and Administration (3 cr)
This course focuses on a variety of topics that are pertinent to the delivery of healthcare in a hospital setting. Topics include hospital governance, medical staff, nursing service, hospital programs, administrator's tasks and functions, unionization and collective bargaining, government financial regulations, and accreditation. PREREQUISITE: 15 credit hours of HCA courses or approval of Chair of Healthcare Administration. Mode of delivery: web-based. 3 lecture hours. Spring semester.

HCA 414 Ambulatory Care Services: Organization and Administration (3 cr)
This course explores the practical aspects of leadership in a primary care setting. Topics include transition from unmanaged to managed care systems, third party payers, physician-staff relationships including practice styles, scheduling, billing productivity, quality assurance, and outcome management. Wellness promotion and marketing strategies will also be discussed. PREREQUISITE: 15 credit hours of HCA courses or approval of Chair of Healthcare Administration. Mode of delivery: web-based. 3 lecture hours. Fall semester.

HCA 415 Healthcare Financial Management (3 cr)
This course explores the organizational and operational aspects of fiscal analysis and internal control of healthcare organization costs. Topics include planning, budgeting, and cost finding including preparation and analysis of an operating budget trending, modeling, revenue, expenses, variance analysis, and margins. Organizational and divisional performance will be measured against internal and external benchmarking tools, assessing capital equipment needs, building a capital budget, and bids. PREREQUISITE: 15 credit hours of HCA courses or approval of chair of Healthcare Administration. CROSS-LISTED: MGT 415. Mode of delivery: web-based. 3 lecture hours. Summer semester.

HCA 416 Data Interpretation and Project Management
This course focuses on analyzing, interpreting and presenting data in the healthcare environment, in addition to basic project management concepts and tools. Students will be

assigned a project which will be utilized to enhance understanding of both topics, as well as, expose students to real-life healthcare scenarios. PREQUISITES**:** 15 credit hours of HCA courses or approval of Chair of Healthcare Administration and STA 330. Mode of delivery: web-based. 3 lecture hours. Summer semester.

HCA 417 Self-Awareness and the Effective Leader
This course focuses on an individualized approach to personal development and leadership. Students will use self-assessments to maximize their own natural abilities, lead teams and interact with others who have strengths and tendencies different from their own. In addition, students will understand their own emotional intelligence score and learn strategies to improve their performance and create healthier work relationships. PREREQUISITE: 15 credit hours of HCA courses or approval of chair of Healthcare Administration. Mode of delivery: web-based. 3 lecture hours. Fall semester.

HCA 420 Practicum (2 cr)
This course offers the opportunity to integrate and apply previously learned health management knowledge and skills. The student will become part of a healthcare organization, working closely with professional managers during a 45 hour practicum. Student, faculty member and preceptor will mutually agree on management area of study and practicum setting. PREREQUISITE: 15 credit hours of HCA courses or approval of chair of Healthcare Administration. Mode of delivery: web-based (45 contact hours with preceptor). Fall and Summer semesters.

HCA 495 Capstone (1 credit)
The capstone experience is aimed at integrating the knowledge that students have developed throughout their undergraduate, bachelor level academic careers in order to create a final capstone project. The project will link the areas of study in the student's personalized Bachelor of Science degree plan to career and intellectual interests. The final written project will consist of research, literature reviews, and analysis toward a specified audience. A classroom presentation of the project is required. In addition, critical thinking skills and servant leadership activities will be assessed. The goal of the capstone experience is to have the student engage in self-assessment, reflection and analysis that prepares them for future success. PREREQUISITES:15 credit hours of HCA courses or approval of Chair of Health Care Administration. Fall and Summer semesters.

HUM 120 Introduction to Film (3 cr)
This course is an introduction to the creative influences and the interaction of separate artistic components involved in the making of films. Mode of delivery: face-to-face, web-based. 3 lecture hours.

MA 101 Medical Assisting Administrative Procedures (4 cr)
This course introduces the medical assisting profession. It focuses on basic medical office functions and emphasizes administrative responsibilities, including bookkeeping, accounting, patient scheduling, referrals, medical record keeping, and communication skills. This course also focuses on medical insurance billing and diagnostic and procedural coding. Medicolegal issues and insurance fraud, abuse, and medical etiquette are discussed. Students will explore and demonstrate computer literacy with Microsoft Word, Excel, PowerPoint, and Outlook computer applications. As students produce work products utilizing critical thinking, library resources and APA format will be applied. Learning styles, time and stress management, and test-taking strategies are introduced. Mode of delivery: web-based. 4 lecture hours. Fall, Spring, and Summer semesters.

MA 102 Medical Assisting Clinical Procedures I (4 cr)
This course introduces students to clinical medical assisting skills. It offers concepts of clinical

procedures, including asepsis and infection control, specimen collection, compassionate patient care, OSHA regulations, vital signs, obtaining patient histories, and chart documentation. Students learn to assist with procedures including pulmonary functions, electrocardiography, prenatal, pediatric, gynecologic, and comprehensive exams. Students will develop a patient education project. Students will attend a 6-hour skills camp day where they will demonstrate all clinical skills learned in class. Mode of delivery: web-based with 1 face-to-face skills lab. 4 lecture hours, 6 lab hours. Fall, Spring, and Summer semesters.

MA 106 Anatomy and Physiology (4 cr)
This course offers basic concepts in human anatomical structure and physiology in relation to body functions. It includes all major body systems regarding gross anatomy and function related to homeostasis. The laboratory component emphasizes lecture topics and further explores tissues and organs. Mode of delivery: web-based. 4 lecture hours. Fall, Spring, and Summer semesters.

MA 108 Diseases of the Human Body (3 cr)
This course studies the major diseases of the urinary, reproductive, digestive, respiratory, circulatory, nervous, endocrine, musculoskeletal, integumentary, and special senses (eye and ear) systems. It includes etiology, signs and symptoms, diagnostic procedures, treatment, prognosis, and common and well-known illnesses prevention. The content also includes the immune and genetic relationships and pain management. Alternative and complementary healthcare is introduced. Students will produce pathology reports and review current research. PREREQUISITE: MA 106. Mode of delivery: web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

MA 122 Medical Assisting Clinical Procedures II (4 cr)
This course focuses on diagnostic testing in the areas of hematology, phlebotomy, chemistry, immunology, microbiology, and urinalysis. Principles of pharmacology, including drug classifications, dosage calculations, and administration of medicines, are introduced and demonstrated. Sterile technique will be covered with CLIA regulations and quality control. Students will attend a 6-hour skills camp day where they will demonstrate all clinical skills learned in class. PREREQUISITES: MA 102, MA 106. Mode of delivery: web-based with 1 face-to-face skills lab. 4 lecture hours. 6 laboratory hours. Fall, Spring, and Summer semesters.

MA 201 Medical Assisting Professional Components (2 cr)
This course focuses on personal attributes, job readiness, workplace dynamics, human resources, risk management, and emphasizes the professional opportunities and responsibilities of the medical assistant. The Medical Assistant is introduced to their role as office manager. Allied health professions, credentialing, and working as part of the healthcare team are discussed. It allows students to discuss situations that arise in the practicum experience. PREREQUISITES: MA 101 and MA 122. COREQUISITES: MA 204. Mode of delivery: web-based. Fall, Spring, and Summer semesters.

MA 205 Medical Assisting Practicum (4 cr)
This course expands knowledge and skills and incorporates previously presented information in the major to prepare the student for transition into practice as a Medical Assistant. The student receives supervised experience in an ambulatory healthcare setting. PREREQUISITES: MA 101, MA 102, MA 122. COREQUISITES: MA 108 and 201. Mode of delivery: web-based. 160 practicum hours. Fall, Spring, and Summer semesters.

MAT 102 Math for General Studies (3 cr)
This course is a general study of mathematics. Topics include critical thinking, sets and diagrams, problem solving, percentages, managing money, fundamental of statistics and probability,

metric conversions, and exponential modeling. The primary focus of this course is to use mathematics as a tool to find solutions to life/career-relevant problems, emphasizing a functional approach. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

MAT 112 Math for Health Professionals (3 cr)
This course focuses on health care applications using linear and exponential algebraic equations (1-step, 2-step, and multi-step). Applications include solution concentrations, dosages, dilutions, and applied solutions and mixture problems. Topics include a substantive review of algebra foundations, algebraic expressions, and linear and exponential equations; units and conversions; estimating, computing, assessing and recording ratios, proportions, percentages and exponents for health science measurements; one-, two-, and three-step unit conversions; understanding metric, apothecary, and household measurement systems in healthcare; computing dosing and concentration from drug labels and administration rates in syringes and intravenous fluid; and assessing accuracy and precision of measurements in decimal, fractional, and exponential representations. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall and Spring semesters.

MAT 120 College Algebra (3 cr)
This course provides an intensified study of algebraic concepts and techniques. Topics include functions, exponents, logarithms, expression simplification, systems of equations, graphical analysis and polynomials. Algebraic problem solving is emphasized in a context relevant to future academic coursework and professional aptitude. Mode of delivery: face-to-face. 3 lecture hours. Fall and Spring semesters.

MED 101 Medical Terminology (1 cr)
This course provides a solid foundation for interpreting, understanding, and using medical terms. Basic prefixes, suffixes, and root words are emphasized as a method of acquiring and retaining knowledge. Exercises stressing spelling, pronunciation, and use of medical terms are included. Mode of delivery: face-to-face, web-assisted. 1 lecture hour. Fall, Spring, and Summer semesters.

***Affiliated colleges and universities may make adjustments to the credits awarded for individual MLS courses.**

MLS 411 Clinical Immunology Didactic (1 cr*)
Principles and procedures of humoral and cellular immunology. Antigen/antibody structure, function and interaction. Theory and clinical correlation of serological testing, molecular diagnostics, human leukocyte antigens, flow cytometry, and quality control. Mode of delivery: face-to-face. 1 lecture hour. Fall semester.

MLS 413 Clinical Immunohematology Didactic I (1 cr*)
Principles and procedures for antigen/antibody detection and identification. Principles and application of major blood group systems regarding Indirect and Direct Antiglobulin testing. Mode of delivery: face-to-face. 1 lecture hour. Fall semester.

MLS 414 Urinalysis, Body Fluids, and Microscopy Didactic (1 cr*)
Theory of renal function in health and disease; renal function tests, including chemical and microscopic examination of urine; analysis of fecal specimens, gastric, spinal fluid and other body fluids; and quality control. Mode of delivery: face-to-face. 1 lecture hour. Summer semester.

MLS 415 Clinical Chemistry Didactic I (2 cr*)

Identification and quantitation of specific chemical substances in blood and body fluids by analytical methodologies; clinical correlation with disease states; principles of instrumentation and quality control. Mode of delivery: face-to-face. 2 lecture hours. Fall semester.

MLS 417 Clinical Hematology Didactic I (1 cr*)
Introductory principles of hematology and hemostasis. Red blood cell, white blood cell and platelet maturation. Identification of cell morphology and inclusions. Red and white blood cell manual testing. Introduction to coagulation factors and overall coagulation cascade. Mode of delivery: face-to-face. 1 lecture hour. Fall semester.

MLS 418 Clinical Laboratory Management Didactic I (1 cr*)
Introduction to laboratory management/administration including: ethics in the laboratory; values; concept of talents and strengths; teambuilding; laboratory ergonomics; conflict resolution; MLS careers; infection control; conducting meetings; aspects of laboratory and patient safety; and professional development. Mode of delivery: face-to-face. 1 lecture hour. Fall semester.

MLS 422 Clinical Microbiology Didactic I (2 cr*)
Theory and techniques of cultivation, isolation and identification of bacteria; clinical correlation to disease states, asepsis, epidemiology; and quality control. Mode of delivery: face-to-face. 2 lecture hours. Fall semester.

MLS 432 Clinical Immunohematology and Immunology Rotation I (2 cr*)
Comprehensive laboratory safety training; practical clinical laboratory experience in immunohematology including: principles and procedures for antigen/antibody detection and identification, crossmatching techniques, component therapy, transfusion reaction evaluation, Rh immunoglobulin; immunology including principles and procedures of humoral and cellular immunology; and molecular diagnostics including clinical correlation, interpretation of results, and quality control for all. Mode of delivery: face-to-face. 90 clinical hours. Fall and Spring semesters.

MLS 433 Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation I (2 cr*)
Comprehensive laboratory safety training; practical clinical laboratory experience in hematology, coagulation, urinalysis, body fluids and bone marrows including principles, instrumentation and manual procedures which determine major hematological and coagulation parameters, microscopic examination of blood smears, and chemical and microscopic renal function testing including clinical correlation, interpretation of results, and quality control for all. Mode of delivery: face-to-face. 90 clinical hours. Fall and Spring semesters.

MLS 435 Clinical Microbiology Rotation I (2 cr*)
Comprehensive laboratory safety training; practical clinical laboratory experience in microbiology including techniques of asepsis, cultivation, isolation and identification of bacteria, fungi, and viruses utilizing manual and automated methods; determination of sensitivity to antimicrobial agents; and infection control and surveillance testing including clinical correlation, interpretation of results and quality control for all. Mode of delivery: face-to-face. 90 clinical hours. Fall and Spring semester.

MLS 436 Clinical Chemistry Rotation I (2 cr*)
Comprehensive laboratory safety training; practical clinical laboratory experience with identification and quantification of specific chemical substances in blood and body fluids by analytical methodologies utilizing both instrumentation and manual methods; principles of instrumentation; and toxicology including clinical correlation, interpretation of results and quality control for all. Mode of delivery: face-to-face. 90 clinical hours. Fall and Spring semester.

MLS 443 Clinical Immunohematology Didactic II (1 cr*)

Component therapy; antibody identification; acceptable transfusion practices, transfusion reaction evaluation; Rh immunoglobulin and Hemolytic Disease of the newborn and quality control. PREQUISITE: MLS 413. Mode of delivery: face-to-face. 1 lecture hour. Spring semester.

MLS 445 Clinical Chemistry Didactic II (2 cr*)
Identification and quantitation of specific chemical substances in blood and body fluids by analytical methodologies; clinical correlation with disease states within and across body systems; and toxicology. PREREQUISITE: MLS 415. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

MLS 447 Clinical Hematology Didactic II (2 cr*)
Identification and clinical correlation of red and white blood cell maturity, morphology and inclusions. Clinical significance and correlation of peripheral blood smears with significant lab values, disease states and treatments. PREREQUISITE: MLS 417. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

MLS 448 Management and Education Methods II (1 cr*)
Laboratory management/administration and education methodology including: the education process and methodologies; continuing education; resume writing; interview skills; interprofessional education and collaborative practice; and rotations through four different sites and/or job classes allowing exposure to alternative areas in which medical laboratory science is practiced. PREREQUISITE: MLS 418. Mode of delivery: face-to-face. 0.6 lecture hours, 1.2 clinical hours. Spring semester.

MLS 452 Clinical Microbiology Didactic II (2 cr*)
Theory and techniques of cultivation, isolation and identification of bacteria and viruses; determination of sensitivity to antimicrobial agents; clinical correlation to disease states and epidemiology; and quality control. PREREQUISITE: MLS 422. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

MLS 462 Clinical Immunohematology and Immunology Rotation II (2 cr*)
In-depth practical experience with principles and procedures for antigen/antibody detection and identification; crossmatching techniques; component therapy; transfusion reaction evaluation; Rh immunoglobulin; principles and procedures of humoral and cellular immunology; and molecular diagnostics including clinical correlation, interpretation of results, and quality control for all. PREREQUISITE: MLS 432. Mode of delivery: face-to-face. 90 clinical hours. Spring and Summer semesters.

MLS 463 Clinical Hematology, Urinalysis, Body Fluids and Microscopy Rotation II (2 cr*)
In-depth practical experience with principles, instrumentation, and manual procedures which determine major hematologic and coagulation parameters; microscopic examination of blood smears; renal function testing including chemical testing and microscopic examination of urine; analysis of fecal specimens, gastric, spinal fluid and other body fluids including clinical correlation, interpretation of results, and quality control for all. PREREQUISITE: MLS 433. Mode of delivery: face-to-face. 90 clinical hours. Spring and Summer semesters.

MLS 465 Clinical Microbiology Rotation II (2 cr*)
In-depth practical experience with techniques of asepsis, cultivation, isolation and identification of bacteria, fungi, mycobacteria, and viruses utilizing manual and automated methods; identification of parasites; determination of sensitivity to antimicrobial agents; serological testing; and infection control and surveillance testing including clinical correlation, interpretation of results, and quality control for all. PREREQUISITE: MLS 435. Mode of delivery: face-to-face. 90 clinical hours. Spring and Summer semesters.

MLS 466 Clinical Chemistry Rotation II (2 cr*)
In-depth practical experience with identification and quantification of specific chemical substances in blood and body fluids by analytical methodologies utilizing both instrumentation and manual methods; principles of instrumentation; and toxicology including clinical correlation, interpretation of results, and quality control for all. PREREQUISITE: MLS 436. Mode of delivery: face-to-face. 90 clinical hours. Spring and Summer semesters.

MLS 472 Clinical Microbiology Didactic III (2 cr*)
Theory and techniques of cultivation, isolation and identification of mycobacteria, fungi, parasites; clinical correlation to disease states, asepsis, epidemiology; and quality control. PREREQUISITE: MLS 452. Mode of delivery: face-to-face. 2 lecture hours. Summer semester.

MLS 477 Clinical Hematology Didactic III (2 cr*)
Principles and procedures of bone marrow techniques and associated disorders. Automated methodologies for hematology testing. Hemostasis and associated disease states, disorders and treatments. Clinical significance and correlation of significant lab values, disease states and treatments for hematology and hemostasis. PREREQUISITE: MLS 447. Mode of delivery: face-to-face. 2 lecture hours. Summer semester.

MLS 478 Management and Education Methods III (3 cr*)
Laboratory management/administration including: management; organizations; decision making and problem solving; management of change; motivation theories; leadership; management of work groups; job design and job description; performance appraisal; human resource management; revenue and cost accounting; salary, wage and material management; laboratory budget; laboratory information systems; policy and procedure manuals; staffing and scheduling; quality assessment and performance improvement; work flow and laboratory design; regulatory and professional oversight of laboratories; marketing; research; method selection and evaluation; certification exam review; and scientific writing such as case studies and presentations. PREREQUISITE: MLS 448. Mode of delivery: face-to-face. 3 lecture hours. Summer semester.

NRP 107 Role of the Nurse (3 cr)
Theories and concepts are provided for applying the nursing process in the coordination of care in order to provide safe, quality health care. Concepts covered include continuity of care, collaboration, delegation, legal and ethical aspects of nursing, effective communication and conflict resolution. Historical perspectives, scope of nursing practice, assessment and data collection will also be emphasized. COREQUISITE: NRP 113, NRP 117. Mode of delivery: face-to-face. 2 lecture hours, 45 lab hours. Fall and Spring semesters.

NRP 111: Basic Pharmacology and Math for Nurses (3 cr)
This course introduces aspects of basic pharmacology in preparation for safe medication administration and entry into nursing practice. Principles of pharmacology and health promotion are emphasized with an overview of drug classifications. The importance of the nurse's role in the administration of medication is examined. PREREQUISITES: NRP 107, NRP 113, NRP 117 COREQUISITE: NRP 131. Mode of delivery: face-to-face. 3 lecture hours. Spring and summer semesters

NRP 113: Foundations of Pathophysiology (2 cr)
This course focuses on foundational concepts of pathophysiology essential to understanding alterations in body systems and developing clinical decision making for health promotion and disease management. The nurse's role in caring for individuals with pathophysiological variations

will be explored. PREREQUISITES: BIO 180 or equivalent transfer credit. COREQUISITE: NRP 107, NRP 117 Mode of delivery: face-to-face. 2 lecture hours. Fall & spring semesters.

NRP 117 Foundational Nursing Practice (5 cr)
This course introduces content in preparation for the NCLEX and entry into practice. The Clinical Judgment Measurement Model is taught to organize basic nursing care as well as to promote client health. Topics focus on the recognition of cues, analysis of treatment, prioritization of care, generation of solutions, nursing interventions, outcome evaluation, assessment, fundamental nursing skills, and health promotion to meet the basic physiological and psychosocial needs of the client. COREQUISITE: NRP 107, NRP 113. Mode of delivery: face-to-face. 3 lecture hours, 45 lab hours, 45 clinical hours. Fall and Spring semesters.

NRP 131: Manager of Care I (4 cr)
This course builds on the content from prior courses in preparation for entry into nursing practice. Theories and concepts are provided for applying the nursing process and Clinical Judgment Model while caring for adults in the acute care setting. Theoretical concepts from this course will be applied in the clinical setting. PREREQUISITES: NRP 107, NRP 113, NRP 117. COREQUISITE: NRP 111. Mode of delivery: face-to-face. 3 lecture hours, 45 clinical hours. Spring and Summer semesters.

NRP 187: Manager of Care II (4 cr)
This course builds on the content in preparation for entry into nursing practice. Theories and concepts are provided for applying the nursing process while caring for adult's patients in the medical-surgical acute care setting. Theoretical concepts from this course will be applied in the clinical setting. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131. COREQUISITE: NRP 191. Mode of delivery: face-to-face. 3 lecture hours, 45 clinical hours. Summer and Fall semesters.

NRP 191: Principles of Maternal-Child Nursing and Mental Health Nursing (5 cr)
This course builds on previous content in preparation for entry into nursing practice. Theories and concepts are provided for applying the nursing process while caring for child-bearing families, pediatric clients, and individuals with mental health alterations. PREREQUISITES: NRP 107, NRP 111, NRP 113, NRP 117, NRP 131. COREQUISITE: NRP 187. Mode of delivery: face-to-face. 4 lecture hours, 45 clinical hours. Summer and Fall semesters.

NRP 196: Capstone I (2 cr)
This course will provide the scope of practice for the LPN to apply within the current healthcare industry. A concentrated preparation for successful completion of the NCLEX-PN is also included. PREREQUISITES: NRP 107, NRP 111, NRP 113, NRP 117, NRP 131, NRP 187, NRP 191. COREQUISITE: NRP 201. Mode of delivery: face-to-face. 2 lecture hours. Fall and Spring semesters.

NRP 201 Advanced Manager of Care I (4 cr)
This course builds on previous content from the Manager of Care course series with a focus on advanced nursing care of adults with multi-system health alterations. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131, NRP 187, NRP, 191. COREQUISITE: NRP 196. Mode of delivery: face-to-face. 2.5 lecture hours, 22.5 lab hours, 45 clinical hours. Fall and Spring semesters.

NRP 221 Advanced Manager of Care II (4 cr)
This course is the second in the Advanced Care course sequence and continues with a focus on advanced nursing care of adults with multi-system health alterations. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131, NRP 187, NRP, 191, NRP 196, NRP 201. COREQUISITE: NRP 261. Mode of delivery: face-to-face. 3 lecture hours; 45 clinical hours. Fall, Spring, and Summer semesters.

NRP 261 Nursing Practicum I (3 cr)
This course emphasizes the synthesis of knowledge gained from prior coursework to support safe and effective care delivery in the role of a professional nurse. It includes a didactic focus on navigating the transition from the student role to professional nursing practice. Students will complete 45 hours of clinical. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131, NRP 187, NRP, 191, NRP 196, NRP 201. COREQUISITE: NRP 221. Mode of delivery: face-to-face. 2 lecture hours; 45 clinical hours. Spring and Summer semesters.

NRP 262 Nursing Practicum II (2 cr)
This course focuses on the synthesis of knowledge gained from previous coursework to support safe, competent care in the role of a professional nurse. Students will complete 90 hours of a precepted clinical experience, applying clinical judgment and professional competencies in a real-world setting. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131, NRP 187, NRP, 191, NRP 196, NRP 201, NRP 221, NRP 261. COREQUISITE: NRP 298. Mode of delivery: face-to-face. 90 clinical hours. Summer and Fall semesters.

NRP 298 Capstone II (2 cr)
This purpose of this course is to provide concentrated preparation for successful completion of the NCLEX-RN©. PREREQUISITES: NRP 107, NRP 111, NRP 117, NRP 113, NRP 131, NRP 187, NRP, 191, NRP 196, NRP 201, NRP 221, NRP 261. COREQUISITE: NRP 262. Mode of delivery: face-to-face. 2 lecture hours. Fall and Summer semesters.

NSG 315 History and Trends in Nursing Practice (1 cr)
This course introduces BSN students to historical, contemporary, and emerging trends that shape professional nursing practice. Students will explore the evolution of nursing roles, regulatory and ethical frameworks, and the profession's relationship to other healthcare disciplines. Emphasis is placed on informed, collaborative, and accountable practice within the healthcare system. Mode of delivery: web-based: 1 lecture hour.

NSG 404 Program Orientation and Professional Writing (1 cr)
This course facilitates the transition of registered nurses to baccalaureate-level practice by introducing strategies for successful completion of the RN-BSN program. Students will enhance scholarly writing skills with a focus on APA formatting and academic integrity. Emphasis is placed on exploring nursing theories and developing a personal professional philosophy to deepen foundational nursing knowledge. This course must be taken in the first term of the RN to BSN curriculum. Mode of delivery: web-based. 1 lecture hour.

NSG 413 Holistic Nursing (3 cr)
This course will examine holistic nursing practices (body, mind, spirit) supportive to the promotion of health in individuals. Historical trends, theoretical influences, evidence-based practice and research, and nursing standards of practice will be analyzed to formulate a professional awareness of holistic nursing. PREREQUISITE: NSG 404 (NSG 404 may be taken with NSG 413). Mode of delivery: web-based. 3 lecture hours.

NSG 414 Advanced Health Assessment (3 cr)
In this course, the learner will develop advanced clinical assessment skills to maintain the health of individuals across the life span through health history intake and physical examination. The learner will integrate data from the health assessment and results from diagnostic/therapeutic procedures to develop a plan of care. Mode of delivery: web-based, 3 lecture hours, 45 lab hours. Corequisite: NSG 404

NSG 416 Information and Financial Management in Nursing (3 cr)
This course introduces the use of informatics and financial management in nursing practice. PREREQUISITES: NSG 404 (may be taken with NSG 416). Mode of delivery: web-based. 3 lecture hours.

NSG 418 Research and Evidence Based Practice (3 cr)
This course introduces students to nursing research as a systematic approach to inquiry that supports evidence-based practice and quality improvement. PREREQUISITES: NSG 404 (NSG 404 may be taken with NSG 418. Mode of delivery: web-based. 3 lecture hours.

NSG 425 Advocacy and Health Policy (3 cr)
This course examines the nurse's role in shaping healthcare policy and delivery across individual, organizational, community, national, and global levels. Students will explore professional advocacy, ethical responsibilities, and strategies for engaging in the political process to influence health outcomes and system-level change. PREREQUISITE: NSG404 (NSG 404 may be taken with NSG 425). Mode of delivery: web-based. 3 lecture hours.

NSG 426 Genomics, Aging and End of Life Care (3 cr)
This course will review the basics of genetics, including the importance of family history, ethical concerns. This course also examines the dynamics of aging and health promotion practices to facilitate healthy aging. Students will explore principles of pain management, palliative care across the life span, and end of life care. PREREQUISITE: NSG 404 (NSG 404 may be taken with NSG 426). Mode of delivery: web-based. 3 lecture hours.

NSG 481 Community Health Nursing (4 cr)
This course introduces the principles and concepts of Community Health Nursing and focuses on population health and determinants that affect health outcomes within aggregate groups. PREREQUISITES: NSG 404 (NSG 404 may be taken with NSG 481). Mode of delivery: web-based. 3 lecture hours, 45 clinical hours.

NSG 483 Theories of Leadership and Management (3 cr)
This course introduces BSN students to foundational theories of leadership, management, and change within healthcare systems. Students will develop competencies in communication, team dynamics, and ethical decision-making while exploring strategies to lead quality improvement and collaborate effectively with diverse healthcare professionals. PREREQUISITES: NSG 404 (NSG 404 may be taken with NSG 483). Mode of delivery: web-based. 3 lecture hours

NSG 485 BSN Professional Nursing Practice (3 cr)
This capstone course provides RN-BSN students with the opportunity to synthesize professional knowledge and reflect on their development as baccalaureate-prepared nurses. Through collaboration with peers and faculty, students will explore nursing philosophy, current trends, and ethical responsibilities while deepening their commitment to the profession and preparing for future leadership roles. NSG 485 must be taken in the last semester of the RN-BSN curriculum. Mode of delivery: web-based. 3 lecture hours.

NTR 205 Nutrition (3 cr)
This course is an introduction to the fundamentals of nutrition and how diet relates to health. Promotion and maintenance of optimal health through nutrition and current nutritional issues encountered by healthcare professionals will also be explored. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

NTR 300 Applied Nutrition (3 cr)
This course presents the application of clinical nutritional concepts for the care of patients cross

the lifespan. A synthesis of dietary management and education for acute and chronic disease conditions as well as nutritional health promotion will be the focus of the course. PREREQUISITE: BIO 185 or NTR 205. Mode of delivery: face-to-face, web-based. 3 lecture hours.

NUA 301 Introduction to Safe Medication Administration (1cr)
Provides a basic understanding of medical terms and abbreviations. Includes study of prefixes, suffixes, word stems, and technical terms with emphasis on proper spelling, pronunciation, and applications. Introduction to the nursing process with special emphasis on assessment and safe medication administration. COREQUISITES: NUA 312, NUA 314. Mode of delivery: hybrid. 1 lecture hour. Fall, Spring, and Summer semesters.

NUA 303 Nursing Pharmacology (3 cr)
Examines pharmacotherapeutic agents used in the treatment of illness and the promotion, maintenance, and restoration of wellness in diverse individuals across the lifespan. Focus is on concepts of safe administration and monitoring the effects of pharmacotherapeutic agents. Prerequisites: NUA 301, NUA 314, NUA 312. Corequisites: NUA 321, NUA 324. Mode of delivery: hybrid. 3 lecture hours. Fall, Spring, and Summer semesters.

NUA 312 Nursing Pathophysiology (3 cr)
Focuses on understanding pathophysiology, its role in body system alterations, and nursing's response to these deviations. Students develop clinical decision-making skills for health promotion, risk reduction, and disease management. COREQUISITES: NUA 301, NUA 314. Mode of delivery: face-to-face. 3 lecture hours. Fall, Spring, and Summer semesters.

NUA 314 Fundamentals of Nursing I (5 cr)
Introduces the concepts and techniques of completing basic nursing skills and physical examinations, while emphasizing health promotion strategies in individuals across the life span. Students will learn a systematic, holistic approach to nursing through in-depth history/data collection, screenings, physical assessment, and application of clinical decision-making skills for safe and effective practice. The student will demonstrate competency in basic nursing skills and physical assessments within the course through guided application in the classroom, lab, and clinical settings. COREQUISITES: NUA 301, NUA 312. Mode of delivery: face-to-face. 3.5 lecture hours, 22.5 clinical hours, 30 lab hours. Fall, Spring, and Summer semesters.

NUA 321 Health Promotion Across the Lifespan (2 cr)
Introduces strategies of health promotion and disease prevention for individuals. Nursing care, including health, wellness, and illness across the lifespan especially in the older adult will be explored. Prerequisites: NUA 301, NUA 314, NUA 312. Corequisites: NUA 303, NUA 324. Mode of delivery: web-based. 2 lecture hours. Fall, Spring, and Summer.

NUA 324 Fundamentals of Nursing II (5 cr)
Continuation of Fundamentals of Nursing I by providing an advanced scientific foundation for clinical nursing practice using a patient-centered, holistic framework across the lifespan. Students will expand upon proficiency of knowledge and scope of nursing skills utilized or delegated by the nurse to provide quality care and ensure patient safety. Students gain competency by practicing skills in a supportive and supervised environment in both lab and clinical. Prerequisites: NUA 301, NUA 314, NUA 312. Corequisites: NUA 303, NUA 321.Mode of delivery: face-to-face. 3 lecture hours, 45 clinical hours, 30 lab hours. Fall, Spring, and Summer semesters.

NUA 364 Person-Centered Care I (5 cr)
Provides foundational knowledge in caring for adult clients with common medical-surgical health problems. Integrate knowledge and skills from previous courses in the care of clients with medical-surgical alterations including health promotion, nutrition, and medication therapy. Prerequisites: NUA 303, NUA 324, NUA 321. Corequisites: NUA 374, NUA 424. Mode of delivery: face-to-face. 3.5 lecture hours, 45 clinical hours, 15 lab hours. Fall, Spring, and Summer semesters.

NUA 374 Concepts of Population Health (3 cr)
Introduces the principles and concepts of Community Health Nursing with a focus on population health and the influences which may affect health outcomes within aggregate groups. Prerequisites: NUA 303, NUA 324, NUA 321. Corequisites: NUA 364, NUA 424. Mode of delivery: web-based. 2.5 lecture hours, 22.5 clinical hours. Fall, Spring, and Summer semesters.

NUA 401 Nursing Research and Evidence-Based Practice (2 cr)
This course introduces students to nursing research as a systematic approach to inquiry that supports evidence-based practice and quality improvement. Prerequisites: NUA 414, NUA 404 Corequisites: NUA 444, NUA 448. Mode of delivery: web-based. 2 lecture hours. Fall, Spring, and Summer semesters.

NUA 404 Maternal Child Nursing (4 cr)
Provides knowledge necessary to practice professional nursing with childbearing families, infants, children, and adolescents. The emphasis is on developing plans for comprehensive healthcare management for childbearing families, for infants, children, and adolescents. Focus includes wellness promotion, illness prevention, risk reduction, and nursing interventions for common acute and chronic health problems, and prenatal care. Prerequisites: NUA 424, NUA 364, NUA 374. Corequisites: NUA 414. Mode of delivery: face-to-face. 3.5 lecture hours, 22.5 clinical hours. Fall, Spring, and Summer semesters.

NUA 414 Person-Centered Care II (4 cr)
In Person Centered Care II, students build upon foundational knowledge from Nursing I to demonstrate enhanced competencies in caring for adult clients with common medical-surgical health conditions. Students will apply and integrate knowledge and skills from previous courses to manage clients with medical-surgical alterations, focusing on health promotion, nutrition, and medication therapy. Emphasis is placed on the ability to provide safe, effective, and evidence-based care for adults through critical thinking, clinical reasoning, and the application of nursing interventions. Prerequisites: NUA 424, NUA 364, NUA 374. Corequisites: NUA 404. Mode of delivery: face-to-face. 3 lecture hours, 45 clinical hours. Fall, Spring, and Summer semesters.

NUA 424 Mental Health Nursing (2 cr)
Implements evidence-based care for clients with psychiatric/mental health issues, including psychosocial concepts, cultural, ethical, and legal influences, therapeutic communication, use of therapies, and strategies to achieve wellness of individuals and family groups. Prerequisites: NUA 303, NUA 324, NUA 321. Corequisites: NUA 364, NUA 374. Mode of delivery: face-to-face. 1.5 lecture hours, 22.5 clinical hours. Fall, Spring, and Summer semesters.

NUA 444 Person-Centered Care III (4 cr)
Person Centered Care III is a continuation of Person-Centered Care II. Provides advanced knowledge in caring for adult clients with common medical-surgical health problems. Integrate knowledge and skills from previous courses in the care of clients with medical-surgical alterations including health promotion, nutrition, and medication therapy. Prerequisites: NUA 414, NUA 404

Corequisites: NUA 401, NUA 448. Mode of delivery: face-to-face. 3 lecture hours, 45 clinical hours. Fall, Spring, and Summer semesters.

NUA 448 Capstone I (1 cr)
The course aims to help students build confidence, identify areas for improvement, and ensure they are well-equipped to demonstrate competency in nursing practice as required by the licensing exam. Students will review test-taking strategies, practice NCLEX-style questions, and focus on critical thinking skills necessary to excel on the exam. Prerequisites: NUA 414, NUA 404 Corequisites: NUA 401, NUA 444. Mode of delivery: face-to-face. 1 lecture hour. Fall, Spring and Summer semesters.

NUA 456 Role of the Nurse Leader (3 cr)
This course develops competencies in nurse leadership and management across the lifespan and diverse care settings. Students will demonstrate the ability to navigate healthcare policy, financial structures, informatics, and regulatory environments that impact nursing practice and patient care. Emphasis is placed on critical analysis of healthcare policy issues and evaluating the nursing profession's influence to drive effective, evidence-based care delivery. Prerequisites NUA 401, NUA 444, NUA 448. Corequisites: NUA 464, NUA 478. Mode of delivery: web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

NUA 464 Nursing Preceptorship (3 cr)
Provides students with the opportunity to complete focused clinical hours to facilitate role transition. Students will synthesize nursing knowledge and skills, applying them to the care of patients. Prerequisites: NUA 401, NUA 444, NUA 448. Corequisites: NUA 456, NUA 478. Mode of delivery: face-to-face. 135 clinical hours. Fall, Spring, and Summer semesters.

NUA 478 Capstone II (2 cr)
Capstone II is a continuation of the initial licensure preparatory course, aiming to further enhance students' readiness for the NCLEX exam. In this course, students engage in more intensive review sessions, practice additional NCLEX-style questions, and receive targeted feedback on their performance. Prerequisites NUA 401, NUA 444, NUA 448. Corequisites: NUA 456, NUA 464. Mode of delivery: face-to-face. 2 lecture hours. Fall, Spring, and Summer semesters.

NUR 134 Fundamentals I (6 cr)
Students will master basic nursing skills and competencies within the course through guided application in the classroom, lab and clinical settings. Developing therapeutic communication through verbal and nonverbal interactions with clients and healthcare professionals. Understand the influence of the history and trends on professional nursing practice. Pre-Requisites: Admission to program. Mode of delivery: face-to-face. 4 lecture hours, 45 lab hours, 22.5 ~~45~~ clinical hours. Fall and Spring semesters.

NUR 207 Introduction to Pharmacology (3 cr)
The purpose of this course is to examine pharmacotherapeutic agents used in the treatment of illness and the promotion, maintenance, and restoration of wellness in diverse individuals across the lifespan. The focus is on integrating the nursing process with concepts of safe administration and monitoring the effects of pharmacotherapeutic agents. Pre-Requisites: BIO 185 or MA 106. Co-requisite: NUR 234. Mode of delivery: face-to-face. 3 lecture hours. Spring and Summer Semesters. **NUR 234 Fundamentals II (6 cr)**
A continuation of Fundamentals of Nursing II introducing the concepts and techniques of completing physical examinations and emphasizing health promotion strategies in individuals across the life span. Students will learn a systematic, holistic approach to nursing with in-depth

history/data collection, screenings, physical assessments, use of the nursing process and clinical decision-making skills. Students will expand knowledge and scope of nursing to provide quality of care and ensure patient safety, with a focus on patient centered care. Students gain competency by practicing skills in a supportive and supervised environment in both lab and clinical. Prerequisite: NUR 134. Corequisite: BIO 302/BIO 225; NUR 207. Mode of delivery: face-to-face. 4 lecture hours, 30 lab hours, 45 clinical hours. Spring and Summer Semesters.

NUR 264 Concepts of Nursing I (5 cr)
Nursing I is the first course in a series of a four-course sequence and has a focus on foundational nursing practice with adult clients experiencing a wide range of acute and chronic health alterations. Prerequisite: NUR 134, NUR 207, NUR 234, BIO 302/BIO 225. Corequisite: NUR 287. Mode of delivery: face-to-face. 3 lecture hours, 30 lab hours, 45 clinical hours. Summer and Fall Semesters.

NUR 287 Application of Nursing Pharmacology (2 cr)
This course builds upon concepts learned in the Introduction to Pharmacology course. This course expands on the application of pharmacotherapeutic agents used in the treatment of illness and promotion, maintenance, and restoration of wellness. In diverse individuals across the lifespan. The focus is application of safe administration and monitoring effects of pharmacotherapeutic agents. Prerequisite: ~~NUR 134,~~ NUR 234, NUR 207, BIO 302/BIO 225. Corequisite: NUR 264. Mode of delivery: face-to-face. 2 lecture hours. Summer and Fall Semesters.

NUR 306 Concepts of Health Promotion (2cr)
This course examines the determinants of health, wellness, and illness across the lifespan. Environmental, sociocultural, and economic factors that influence health care practices are emphasized, as well as the collaborative relationship that exists between the patient and the nurse in this process. Strategies of health promotion are explored. Prerequisite: NUR 264, NUR 287. Corequisite: NUR 324, NUR 344. Mode of delivery: web-based. 2 lecture hours. Fall and Spring Semesters

NUR 324 Concepts of Nursing II (4 cr)
Nursing II is the second course in a four-course sequence that builds upon concepts of nursing I. The course focuses on nursing practice with adult clients experiencing a wide range of acute and chronic health alterations. Prerequisite: NUR 264, NUR 287, PSY 202, BIO 203, NTR 205/300 Corequisite: NUR 306, NUR 344. Mode of delivery: face-to-face. 2.5 lecture hours, 15 lab hours, 45 clinical hours. Fall and Spring Semesters.

NUR 344 Mental Health Nursing Concepts and Practice (3 cr)
Implement evidence-based care for clients with psychiatric/mental health issues, including psychosocial concepts; safety, cultural, ethical, and legal influences; therapeutic communication; use of therapies; and strategies to achieve wellness of individuals and family groups. Prerequisite: NUR 264, NUR 287. Corequisite: NUR 306, NUR 324. Mode of delivery: face-to-face. 2.5 lecture hours, 22.5 clinical hours. Fall and Spring Semesters.

NUR 354: Pediatric Nursing Concepts and Practice (3 cr)
This course provides the student with the knowledge necessary to practice professional nursing with infants, children, and adolescents. Emphasis is on developing plans for comprehensive health care management and anticipatory guidance for pediatric clients. Focus includes wellness promotion, illness prevention, risk reduction, and nursing interventions for common acute and chronic pediatrics health problems. Prerequisite: NUR 306, NUR 324, NUR 344.

Corequisite: NUR 367, NUR 384, NUR 431. Mode of delivery: face-to-face. 2.5 lecture hours, 22.5 clinical hours. Spring and Summer Semesters.

NUR 367 Gerontological Nursing Concepts and Practice (2 cr)
This course focuses on care management of the older adult, including reducing adverse events and maximizing quality of life. Prerequisite: NUR 324, NUR 306, NUR 344, PSY 202, PHI 314 or PHI 320. Corequisite: NUR 354, NUR 384, NUR 431. Mode of delivery: web-based. 2 lecture hours. Spring and Summer Semesters.

NUR 384 Concepts of Nursing III (4 cr)
Continuation of Nursing II with application of the nursing process to the care of the adult client experiencing medical-surgical conditions. The course focuses on nursing practice with adult clients experiencing a wide range of acute and chronic health alterations. Prerequisite: NUR 306, NUR 324, NUR 344. Corequisite: NUR 354, NUR 367, NUR 431. Mode of delivery: face-to-face. 2.5 lecture hours, 15 lab hours, 45 clinical hours. Spring and Summer Semesters.

NUR 394 Population Health Nursing Concepts and Practice (3 cr)
This course introduces the principles and concepts of Community Health Nursing and focuses on population health and the determinants that affect health outcomes within aggregate groups. Prerequisites: NUR 354, NUR 367, NUR 384, NUR 431, SOC 102. Corequisite: NUR 414, NUR 424, NUR 468. Mode of delivery: web assisted. 2 lecture hours and 45 clinical hours. Summer and Fall Semesters.

NUR 414 Concepts of Nursing IV (4 cr)
Nursing IV is the final course in a four-course sequence that builds upon medical-surgical nursing III. The course focuses on adult clients experiencing complex multi-system illness. Prerequisites: NUR 354, NUR 367, NUR 384, NUR 431. Corequisite: NUR 394, NUR 424, NUR 468. Mode of delivery: face-to-face. 2.5 lecture hours, 15 lab hours, 45 clinical hours. Summer and Fall Semesters.

NUR 424 Maternal-Newborn Nursing Concepts and Practice (3 cr)
Provides the student with the knowledge necessary to practice professional nursing with childbearing families. Emphasis is on developing plans for comprehensive health care management and anticipatory guidance for childbearing families. Focus includes wellness promotion, illness prevention, risk reduction, and nursing interventions for common acute and chronic health problems of pregnancy. Collaboration with other providers and appropriate referral are integrated throughout the course. Prerequisites:: NUR 354, NUR 367 NUR 384, NUR 431. Corequisite: NUR 394, NUR 414, NUR 468. Mode of delivery: face-to-face. 2.5 lecture hours, 22.5 clinical hours. Summer and Fall Semesters.

NUR 431 Nursing Research and Evidence-Based Practice (3 cr)
This course introduces students to nursing research as a systematic approach to inquiry that supports evidence-based practice and quality improvement. Prerequisites: STA165 or STA330, PHI 314 or PHI 320, & ENG 102, NUR 306, NUR 344, NUR 324. Corequisite: NUR 354, NUR 367, NUR 384. Mode of delivery: Web-based3 lecture hours. Spring and Summer Semesters.

NUR 468 Nursing Leadership (3 cr)
This course develops competencies in nurse leadership and management across the lifespan and diverse care settings. Students will demonstrate the ability to navigate healthcare policy, financial structures, and regulatory environments that impact nursing practice and patient care. Emphasis is placed on critically analyzing healthcare policy issues and evaluating the nursing profession's influence on policy and regulation to drive effective, evidence-based care delivery.

Pre-Requisites: NUR 384, NUR 354, NUR 367, NUR 431. Corequisite: NUR 394, NUR 414, NUR 424. Mode of delivery: web-based. 3 lecture hours. Summer and Fall Semesters.

NUR 453 Informatics and Financial Management in Nursing (3 cr)
This course introduces the use of informatics and financial management in nursing practice. Pre-Requisites: NUR 414, NUR 424, NUR 394, NUR 468. Corequisite: NUR 464, NUR 474, NUR 478. Mode of delivery: web-based. 3 lecture hours. Fall and Spring Semesters.

NUR 464 Complex Nursing Practice (3 cr)
In this course, students will apply and integrate knowledge from previous courses to demonstrate competencies in providing care for adult clients with advanced and complex multi-system illnesses. Emphasis is placed on critical thinking, evidence-based practice, and the development of skills required to manage the care of patients with intricate health needs, ensuring safe, holistic, and effective interventions across multiple systems. Prerequisite: NUR 414, NUR 424, NUR 394, NUR 468. Corequisites: NUR 453, NUR 478, NUR 474. Mode of delivery: face-to-face. 2 lecture hours, 45 clinical hours. Fall and Spring Semesters.

NUR 474 Professional Nursing Practicum (3 cr)
The focus is on a 135-hour preceptor clinical practicum in which students work directly with an experienced Registered Nurse. Prerequisites: NUR 414, NUR 424, NUR 394, NUR 468 Corequisite: NUR 453, NUR 464, NUR 478. Mode of delivery: face-to-face. 135 clinical hours. Fall and Spring Semesters.

NUR 478 Capstone (2 cr)
This course reviews nursing knowledge and skills, including concepts from the NCLEX-RN test plan, that are required for licensure examination and entry into the practice of professional nursing. Focus on assessment and resolution of knowledge deficits. Prerequisites: NUR 414, NUR 424, NUR 394, NUR 468. Corequisite: NUR 453, NUR 464, NUR 474. Mode of delivery: face-to-face. 2 lecture hours. Fall and Spring Semesters.

PBH 180 Intro to Public Health (3 cr)
This course introduces the five core disciplines of public health: Healthy policy and management, social and behavioral sciences, biostatistics, epidemiology, and environmental health. The history of public health is explored, from landmark events to the current issues in public health today. The concepts of health equity, health disparities, and determinants of health are also presented. Current topics in public health are discussed including global issues, infectious diseases, environmental toxins, current research, and the impact of healthcare reform on public health services. PREREQUISITE: None. Mode of delivery: web-based. 3 lecture hours. Fall semester.

PBH 260 Environmental Health (3 cr)
This course explores the relationship of people to their environment by examining health issues, scientific causes, and approaches to control major environmental health problems. Emphasis is placed on understanding the ways in which biological, chemical, and physical agents in the environment cause disease and how it can be prevented or controlled within human populations. Mode of delivery: web-based. 3 lecture hours. Spring semester.

PBH 285 Public Health Disaster Preparedness and Emergency Management (3 cr)
This course introduces students to the core principles and practices of disaster preparedness and emergency planning in response to all types of hazards, threats, catastrophes, disasters and public health issues. Students will analyze the four components of Emergency Management:

Mitigation, Disaster Preparedness, Response, and Recovery. Mode of delivery: web-based. 3 lecture hours. Summer semester.

PBH 301 Healthcare Delivery in the United States – A Consumer Perspective (3 cr)
This course provides an overview of the nature, organization, and function of the continuum of health services found in the United States. Emphasis is placed on the interrelation of cultural, economic, political, and social aspects of healthcare delivery at the federal, state, and local level. Topics include healthcare costs, accessibility of services, governmental influence on healthcare delivery, private industry role in healthcare, services for the medically indigent and elderly, ethical issues regarding transplants, reproductive technology, end of life decisions, and funding. CROSS-LISTED: HCA 301. Mode of delivery: web-based. 3 lecture hours. Fall semester.

PBH 303 Healthcare Economics (3 cr)
This course explores some of the major issues facing the healthcare industry and the effect that public policy and business environment has on a healthcare organization. Emphasis is on supply and demand theory, reimbursement systems, managed care, DRG prospective payment, insurance, Medicare, Medicaid, governmental regulations, accessibility, eligibility, budgeting, and planning. Students learn to use informational and research tools to make effective management decisions. CROSS-LISTED: MGT 303. Mode of delivery: web-based. 3 lecture hours. Fall semester.

PBH 315 Global Health Issues (3 cr)
This course introduces and examines major health and health-related challenges of developing, resource-constrained, and emerging nations and discusses how individual countries and global health partners are finding solutions to address these challenges. Students will study and analyze a variety of health priorities among different populations, cultural settings, and health systems in relation to global health goals and partnerships. Issues of global health are interconnected with the most demanding cultural, socio-economic, physical and biological stressors of our time. These issues lie at the interconnection of achieving and sustaining social, human, and economic development requiring the best of interdisciplinary, multidisciplinary and trans-disciplinary methods and evidence-based strategies, including vigilance in cultural competence. Mode of delivery: web-based. 3 lecture hours. Spring semester.

PBH 385 Public Health Assessment and Evaluation (3 cr)
The Public Health Assessment and Evaluation Course will teach students how to perform, analyze, and interpret all components of a comprehensive health assessment, from the individual to the population. Students will learn how assessment directs necessary public health programs, encourages health promotion, and guides disease prevention. PREREQUISITES: EPI 340. Mode of delivery: web-based. 3 lecture hours. Summer semester.

PBH 410 Public Health Policies and Law (3 cr)
This course will provide students with in-depth knowledge related to Public Health policies and law. Students will learn how public health policies and laws are formulated. The course will explore seminal issues regarding health policy, government, regulation of unhealthy products, promoting healthy behaviors, and public health surveillance, within the public health system. PREREQUISITES: HCA 301. COREQUISITE: HCA 303. Mode of delivery: web-based. 3 lecture hours. Summer semester.

PBH 415 Public Health Advocacy (3 cr)
This course is designed to familiarize students with key aspects of developing partnerships among private and public sector organizations for the purpose of assessing and improving the health of communities. Particular skills include coalition development, developing constituency/partnerships, team building, leadership, and advocacy for public health issues. Mode of delivery: web-based. 3 lecture hours. Summer semester.

PBH 425 Public Health Program Planning and Health Promotion (3 cr)
This course provides core skills in planning and developing community health interventions in order to implement change at the individual, family, and community levels. An emphasis is placed on applying health promotion planning skills in designing a program for a target population. Mode of delivery: web-based. 3 lecture hours. Fall semester.

PBH 440 Grant Writing (3 cr)
This course examines the basic concepts of grant development, components of a grant, and research skills for identifying funding sources. Students will write a grant proposal to demonstrate the essential components of the application process. Students will also learn how to develop a budget for a proposed project and the financial documents needed. PREREQUISITES: ENG 102, HCA 303. Mode of delivery: web-based. 3 lecture hours. Fall semester.

PBH 460 Practicum (2 cr)
This course offers the opportunity to integrate, apply and be exposed to professions in the healthcare organization. Student, faculty member and preceptor will mutually agree on area of study and practicum setting. PREREQUISITE: Approval of Program Chair. Mode of delivery: web-based. 1 lecture hour, 3 preceptorship hours. Fall and Summer semester.

PBH 495 Capstone (1 cr)
The capstone experience is aimed at integrating the knowledge that students have developed throughout their undergraduate, bachelor-level academic careers in order to create a final capstone project. The project will link the areas of study in the student's personalized Bachelor of Science in Public Health degree plan to career and intellectual interests. The final written project will consist of research, literature reviews, and analysis toward a specified audience. A classroom presentation of the project is required. In addition, critical thinking skills and servant leadership activities will be assessed. The goal of the capstone experience is to have the student engage in self-assessment, reflection and analysis that prepares them for future success. PREREQUISITE: Approval of Program Chair. Mode of delivery: web-based. 1 lecture hour. Fall and Summer semester.

PHA 202 Pharmacology (3 cr)
This course is designed to give students an overview of the general principles of pharmacology and pharmacokinetics. Topics include the absorption, distribution, metabolism, and excretion of drugs, major drug classifications, and the dosages, therapeutic uses and actions, drug interactions, and adverse drug reactions of the commonly prescribed drugs. PREREQUISITE: BIO 185 or MA 106. Mode of delivery: face-to-face, web-based. 3 lecture hours. Summer semester.

PHI 110: Critical Thinking in a Diverse World (3 cr)
This course introduces the strategic concepts and skills of critical thinking as a foundation for providing competent healthcare in an ever-changing, diverse society. Units explored include the fundamentals of critical thinking, critical thinking for life and learning, essential skills of applied critical thinking in a diverse world, and essential skills of applied critical thinking in healthcare contexts. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

PHI 120: Introduction to Philosophy (3 cr)
This course will provide students with a firm grounding in the discipline of philosophy. It will help them to cultivate a deeper reverence for all persons by giving them a sound understanding of the nature of the human person, a topic that philosophy has proven particularly adept at addressing. This course will lead students towards this goal by training them to articulate the

intrinsic dignity of each person through the conceptual tools of philosophical discourse. Mode of delivery: face-to-face, web-based. 3 lecture hours.

PHI 280: Caring in a Diverse Healthcare Environment (3 cr)
This course facilitates an integration of personal and professional values that form the foundation for a philosophy of care giving and prepares students for the realities and challenges of care giving in their healthcare profession. The course examines dimensions of self-care to enhance preparation for a career in a healthcare profession. It explores the holistic care of others including vulnerable and culturally diverse patients, with a focus on suffering, faith, hope, healing, and death and dying. Students will also take part in a Service Learning Project where they will have the opportunity to both serve and learn from a vulnerable or diverse group. PREREQUISITE: Two semesters of professional courses in the major with three semesters recommended. Mode of delivery: web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

PHI 301 Critical Thinking (3 cr)
This course explores the nature and applications of critical and creative thinking in life, learning, and healthcare practice. Topics considered include the dispositions of an ethical reasoner, the universal elements of thought, and the evaluative standards for monitoring and the strategic skills for improving one's thinking abilities. This course may be used to meet the Communication Competency Requirement and Critical Thinking requirement for BSHCA and BSHS degrees. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall semester.

PHI 302 Applied Critical Thinking (3 cr)
This course gives an advanced exploration and application of concepts and skills essential for practicing critical thinkers and competent health-care professionals in a diverse society. Opportunities are provided to develop proficiency in identifying and managing complex client problems and outcomes. Units explored include key issues in critical thinking, learning and life applications of critical thinking, and developing advanced critical thinking skills as applied in providing competent, professional healthcare. PREREQUISITE: PHI 110. Mode of delivery: face-to-face. 3 lecture hours.

PHI 314 Ethics (3 cr)
An introductory survey of the major moral theories of egoism, utilitarianism, deontological ethics, natural law theory, divine command theory, Kantian ethics, and virtue ethics. The course includes the application of these theories to practical moral dilemmas such as those that arise in the deliberations of freedom and determinism, truth and justice, reward and punishment, war, the beginning and end of human life, medical ethics, business ethics, and environmental ethics. Topics may vary. Mode of delivery: web-based. 3 lecture hours.

PHI 320 Bioethics (3 cr)
This course provides future healthcare professionals with structured opportunities to strengthen their ethical decision-making skills and their understanding of key terms, ethical standards, and moral theories. Students will examine a number of clinical cases and contemporary controversies and their connection with personal ethics, the law, and religion. Special emphasis will be given to how different cultures, religions, and belief systems make life and death decisions. An investigation of issues, principles, and theories in bioethics including a close examination of specific cases will be discussed. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

PHY 101 Physics I (with Lab) (4 cr)

This course is designed to gain an understanding of the physics of everyday phenomena. Emphasis is given to developing critical thinking and reasoning skills toward the practical application of concepts in physics. Topics include measurement and analysis, motion, force, gravitation, work and energy, linear and angular momentum, conservation of energy, fluids, thermal physics, gases, electricity, magnetism and sound. The accompanying lab will reinforce lecture through hands-on experimentation. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Fall, Spring, and Summer semesters.

PHY 102 Physics II (with Lab) (4 cr)
A second course in a two-semester sequence designed to stress the principles of modern physics which include mechanics, elasticity, vibration and wave motion, electricity and magnetism, light, optics, atomic, nuclear phenomena and relativity. The accompanying lab will reinforce lecture through hands-on experimentation. PREREQUISITE: PHY 101. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours. Spring semester.

PSY 101 General Psychology (3 cr)
This course explores the discipline of psychology by examining central theories, scientific research and application of psychological principles on topics such as learning, motivation, emotion, personality, social psychology, and memory. Students learn to apply various psychological concepts to their experiences in everyday life. Particular emphasis is placed on the role of psychology in health and social behavior. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

PSY 180 Introduction to Human Services (3 cr)
This course will provide an introductory overview of Human Services; including its history, theories, and ethical standards. Students will explore the roles, responsibilities, skills, and qualities of human service professionals. PREREQUISITE: PSY 101. Mode of delivery: face-to-face, web-based. 3 lecture hours.

PSY 202 Developmental Psychology (3 cr)
This course examines biological, environmental, and psychological factors involved in human life span development from conception to death. Cognitive, physical, emotional, and social aspects of age-related change are explored from theoretical and empirical perspectives. Issues in life span development are examined through major developmental theories, with special emphasis on the practical application of these theories. PREREQUISITE: PSY 101. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

PSY 240 Gerontology and Aging (3 cr)
This course is designed to provide an overview of aging and the field of gerontology. Topics include population demographics, ageism, biological, psychological, and sociological aspects of aging, communication with elders, healthy aging, cultural diversity, legal issues, and end of life. Mode of delivery: face-to-face. 3 lecture hours.

PSY 303 Abnormal Psychology (3 cr)
This course is a descriptive and explanatory survey of major behavior disorders from both clinical and theoretical perspectives. Included are diagnostic categories (such as depression and schizophrenia) etiology, and treatment of maladaptive or abnormal behaviors. PREREQUISITE: PSY 101. Mode of delivery: face-to-face, web-based. 3 lecture hours. Spring semester.

PSY 325 Techniques of Individual/Group Counseling (3 cr)
This course will focus on developing listening, interviewing, and counseling skills for working with diverse individuals, couples, families, and groups. Students will spend time developing and practicing these skills including establishing rapport, empathetic listening, probing, confronting,

and problem solving. PREREQUISITE: PSY 180. Mode of delivery: face-to-face, web-based. Summer semester.

PSY 365 Human Services Field Experience (3 cr)
This course will integrate theory with on-site practical experience in a human service agency. Students will learn about the agency's setting, methods of service, delivery, and target population while gaining knowledge and skills needed in the human service field. PREREQUISITE: PSY 180. Mode of delivery: web assisted. 1 lecture hours, 2 practicum hours. Fall and Spring semesters.

PSY 410 Social Psychology (3 cr)
This course will explore how individual human behavior, feelings, and thoughts are influenced by others. Students will learn how to apply social psychological principles to everyday life situations. Topics that will be covered include conformity, mass communication, propaganda, persuasion, the development of attitudes, helping behavior, deception, attraction, and how humans can commit "inhuman" acts. PREREQUISITES: PSY101, SOC102. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall Semester.

PTA 101 Fundamentals of Physical Therapy (with lab) (3 cr)
This course is an introduction to physical therapy and the role of the physical therapist assistant including historical perspectives, professional ethics, the role of the American Physical Therapy Association, and the patient/client management model. Skill and safety in positioning, draping, infection control, managing equipment, transfers, and assistive devices will be covered. Medical records, documentation, professional behaviors, and learning styles are also introduced. PREREQUISITE: Admission to the PTA major, MED 101. COREQUISITE: PTA 130, PTA 135, PTA 137. COREQUISITE: PTA 103. Mode of delivery: face-to-face. 1.5 lecture hours, 3 laboratory hours. Fall semester.

PTA 130 Kinesiology (with lab) (4 cr)
This course is an introduction to the study of human movement. Forces, levers, joint function, muscle function, and analysis of movement are covered. Surface anatomy is also emphasized. PREREQUISITES: Admission to the major, BIO 180. COREQUISITE: PTA 101, PTA 135, PTA 137. Mode of delivery: face-to-face. 2.5 lecture hours, 3 laboratory hours. Fall semester.

PTA 135 Essential Skills in Physical Therapy I (with lab) (2 cr)
Beginning data collection skills are developed in the course. Visual appraisal, interviewing, vital signs, anthropometrics, cognition, pain assessment, range of motion, muscle strength, skin integrity, sensation, posture, and gait are covered. Guidelines for documentation are integrated into the content. Laboratory sessions will reinforce lecture material and allow for skill development. PREREQUISITES: Admission to the major, BIO 185, ENG 101, MAT 120. COREQUISITE: PTA 101, PTA 130, PTA 137. Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours. Fall semester.

PTA 137 Essential Skills in Physical Therapy II (with lab) (2 cr)
This course provides continued instruction in data collection techniques including balance, coordination, muscle length, respiratory function, endurance, and functional assessment tools. Motor development milestones and environmental barriers are presented. Principles of teaching and learning are introduced. Guidelines for documentation are integrated into the content. Billing and coding are introduced. Laboratory sessions reinforce lecture material and allow for skill development. PREREQUISITES: Admission to the major, PSY 202. COREQUISITES: PTA 101, PTA 130, PTA 135. Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours. Fall semester.

PTA 160 Physical Therapy Modalities (with lab) (4 cr)
The focus of this course is on the application of thermal, mechanical, and electrotherapeutic modalities. Indications, precautions, and contraindications are discussed. Laboratory sessions will reinforce lecture material and allow for skill development. Case studies will reinforce legal and ethical practice in regard to modalities. PREREQUISITES: PTA 101, PTA 130, PTA 135, PTA 137. COREQUISITES: PTA 162, PTA 163. Mode of delivery: face-to-face. 2.5 lecture hours, 3 laboratory hours. Spring semester.

PTA 162 Therapeutic Exercise (with lab) (4 cr)
This course introduces the principles of exercise training and progression. Specific responses of various physiological systems to exercise are presented. Benefits of physical activity and indications for specific exercises are discussed. Laboratory sessions will reinforce lecture material and allow for skill development. PREREQUISITES: PTA 101, PTA 130, PTA 135, PTA 137. COREQUISITES: PTA 160, PTA 163. Mode of delivery: face-to-face. 2 lecture hours, 4 laboratory hours. Spring semester.

PTA 163 PTA Clinical I (1 cr)
This course provides students with the opportunity to interact with physical therapy staff and other healthcare practitioners in a clinical setting and to continue practicing skills. Students will correlate theory to clinical practice and perform physical therapy data collection techniques and interventions under the supervision of a licensed physical therapist and/or physical therapist assistant. This experience provides an introduction to progression and monitoring of a care plan in the clinical environment. Students will incorporate the core values of Mercy Health Sciences University into their interactions with patients, families, and the healthcare team. PREREQUISITES: PTA 101, PTA 130, PTA 135, PTA 137. COREQUISITES: PTA 160, PTA 162. Mode of delivery: face-to-face. (This clinical is 40 hours; hours vary by week.) Spring semester.

PTA 201 Physical Therapy Interventions for Musculoskeletal and Integumentary Conditions (with lab) (3 cr)
This course focuses on the prevention and management of musculoskeletal and integumentary conditions. Specific therapeutic interventions will be presented. Application of exercise and tissue healing principles is emphasized. Laboratory sessions reinforce lecture material and allow for skill development. PREREQUISITES: BIO 225 or 302,PTA 160, PTA 162, PTA 163. COREQUISITES: PTA 202, PTA 204. Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours. Spring semester.

PTA 202 Physical Therapy Interventions for Neuromuscular and Cardiopulmonary Conditions (with lab) (3 cr)
This course focuses on the prevention and management of neuromuscular and cardiopulmonary conditions. Specific therapeutic interventions will be presented. Application of exercise and motor control principles is emphasized. Laboratory sessions reinforce lecture material and allow for skill development. PREREQUISITES: BIO 225 or 302, PTA 160, PTA 162, PTA 163. COREQUISITES: PTA 201, PTA 204. Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours. Spring semester.

PTA 204 Professional Issues (2 cr)
This course focuses on professional skills needed to function in entry-level practice. Students will explore communication, values, ethical situations, advocacy, organizational structures, quality improvement, federal and state regulations, and career planning. Preparation for the licensure examination begins. PREREQUISITES: PTA 160, PTA 162, PTA 163. COREQUISITES: PTA 201, PTA 202. Mode of delivery: face-to-face. 2 lecture hours. Spring semester.

PTA 230 Issues in Clinical Practice (1 cr)
This course provides students with the opportunity to reflect on clinical experiences. Topics include ethical situations, quality assurance, organizational structures/operations, and clinical problem solving. The collaborative relationship between the physical therapist and the physical therapist assistant will be reinforced. The importance of lifelong learning is emphasized. PREREQUISITES: PTA 204. COREQUISITES: PTA 232, PTA 234, PTA 235. Mode of delivery: face-to-face. 1 lecture hour. Summer semester.

PTA 232 PTA Clinical II (6 cr)
This course provides students with the opportunity to interact with physical therapy staff and other healthcare practitioners in a clinical setting and to continue development of clinical skills. Students will perform physical therapy data collection and interventions under the supervision of a licensed physical therapist and/or physical therapist assistant. Students will incorporate the core values of Mercy Health Sciences University into their interactions with patients, families, and the healthcare team. This experience occurs off-campus. PREREQUISITES: PTA 201, PTA 202, PTA 204. COREQUISITES: PTA 230, PTA 234, and PTA 235. Mode of delivery: face-to-face. (This clinical is 40 hours/week for 6 1/2 weeks). Summer semester.

PTA 234 PTA Clinical III (6 cr)
This course provides students with the opportunity to perform the duties and responsibilities of an entry-level physical therapist assistant under the supervision of a licensed physical therapist and/or physical therapist assistant. Students will incorporate the core values of Mercy Health Sciences University into their interactions with patients, families, and the healthcare team. This experience occurs off-campus. PREREQUISITE: PTA 201, PTA 202, PTA 204. COREQUISITE: PTA 230, PTA 232, PTA 235. Mode of delivery: face-to-face (This clinical is 40 hours/week for 6 1/2 weeks). Summer semester.

PTA 235 PTA Seminar (1 cr)
This course serves as a culminating experience in which students are expected to apply knowledge gained throughout the curriculum to professional practice. Students will select a clinically-related project which will be completed during Clinical III. A formal paper and presentation to peers and faculty will follow. A mock licensure examination will also be administered. PREREQUISITES: PTA 201, PTA 202, PTA 204. COREQUISITES: PTA 230, PTA 232 and PTA 234. Mode of delivery: face-to-face. 1 lecture hour. Summer semester.

RAD 101 Foundations in Radiologic Imaging (2 cr)
Based on the belief that all persons have the right to warm, personal, and quality care, this course is designed to provide students with the knowledge and skills to function as caring and compassionate individuals when performing medical imaging procedures. Students will explore topics such as the history of medical imaging, the student's role on the healthcare team, radiation protection procedures, ethical and legal principles, medical terminology, patient care techniques, and methods for protecting self, patient, and public from ionizing radiation. COREQUISITES: RAD 104, RAD 110. Mode of delivery: web based. 2.5 lecture hours. Summer semester.

RAD 104 Principles of Radiologic Imaging I (2 cr)
Producing diagnostic radiographic images involves an understanding of a multitude of technical factors and their effect on the image. Students are challenged to correlate their understanding of human anatomy and physiology to the effect of radiation on the human body. Through in-depth discussions and class activities, students will learn how to utilize technical factors to produce quality diagnostic images. These images are critical in the diagnosis of injury

or disease. COREQUISITES: RAD 101, RAD 110. Mode of delivery: web based. 2.5 lecture hours. Summer semester.

RAD 110 Applied Radiography I (3 cr)
Radiographic imaging involves much more than just bones. Imaging the intricate internal anatomy of the human body requires students to understand and utilize a wide variety of positioning techniques. Producing a diagnostic study of the hand requires a minimum of three different patient positions while imaging the digestive system requires many positions and collaboration between a radiologist, a staff radiographer, and the student to assure that all anatomy is visualized. Through the use of intensive classroom and laboratory sessions, the student is introduced to the organization and functioning of the radiology department as well as positioning techniques for the chest, abdomen, upper extremity, and lower extremity. COREQUISITES: RAD 101, RAD 104. Mode of delivery: hybrid. 2 hours lecture and 2 hours lab each week. Summer semester.

RAD 111 Clinical Practicum I (2 cr)
This course is designed to introduce students to the clinical environment. Through weekly rotations, students have the opportunity to interact with staff radiographers and radiologists to begin developing clinical skills. Students will correlate theory to practice by developing a Technique Book and performing radiographic examinations on patients under the supervision of staff radiographers. Students are challenged to incorporate the core values of Mercy into their interactions with patients, patients' families, and the healthcare team. Instructor and clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to correlate theory to practice. PREREQUISITES: RAD 101, RAD 104, RAD 110. COREQUISITES: RAD 114, RAD 120. Mode of delivery: face-to-face. 16 clinical practicum hours. Fall semester.

RAD 114 Principles of Radiologic Imaging II (2 cr)
This course is designed to build on RAD 104 and the knowledge of principles and procedures needed to image human anatomy. Previously learned factors will be reinforced, with new technical factors introduced, and AEC/manual techniques leading to a broad based knowledge of imaging techniques. Students will also be introduced to digital radiography and PACS. PREREQUISITES: RAD 101, RAD 104, RAD 110. COREQUISITES: RAD 111, RAD 120. Mode of delivery: web based . 2 lecture hours. Fall semester.

RAD 116 Imaging Systems (3 cr)
Through a variety of classroom activities, students will explore image processing, fluoroscopy, digital imaging, and advanced imaging procedures to correlate theory with practice. Due to the rapidly changing field of medical imaging, new and emerging imaging systems will be incorporated into this course. The student will also be introduced to modalities beyond diagnostic imaging such as CT, MRI, Nuclear Medicine, Radiation Therapy and Ultrasound. PREREQUISITES: RAD 111, RAD 114, RAD 120. COREQUISITES: RAD 121, RAD 130. Mode of delivery: web based. 3 lecture hours. Spring semester.

RAD 120 Applied Radiography II (3 cr)
This course is designed to build on the cognitive, psychomotor, and affective skills learned in RAD 110. Intensive classroom and laboratory sessions will continue as students learn how to position patients for examinations of the spinal column, shoulder girdle, pelvic girdle, gastrointestinal tract, and genitourinary system. An in-depth discussion on contrast media and their usage in medical imaging will be presented. This course will introduce students to the preparation of clinical case studies to correlate theory with practice. PREREQUISITES: RAD 101, RAD 104, RAD 110. COREQUISITES: RAD 111, RAD 114. Mode of delivery: hybrid. 1.5 lecture hours, 3 laboratory hours. Fall semester.

RAD 121 Clinical Practicum II (2 cr)
This course allows students to continue performing radiographic examinations learned in RAD 110, begin performing examinations learned in RAD 120, and increase participation in procedures involving the gastrointestinal tract, genitourinary system, surgical procedures, trauma, and mobile examinations. The core values of Mercy will continue to be emphasized as students expand their patient care responsibilities. PREREQUISITES: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120. COREQUISITES: RAD 116, RAD 130. Mode of delivery: face-to-face. 16 clinical hours. Spring semester.

RAD 130 Applied Radiography III (2 cr)
This course is the third in the Applied Radiography series and builds on the previous two courses as students continue to learn positioning procedures in order to produce quality diagnostic images to help radiologists and physicians interpret patients' injuries and diseases. During this course, students will learn positioning techniques for the skull and facial bones. In addition, they will expand their knowledge of radiographic examinations by researching special imaging procedures such as myelograms, arthrograms, and venograms. Imaging techniques specific to the geriatric and pediatric patient will be presented. PREREQUISITES: RAD 101, RAD 104, Rad 110, RAD 111, RAD 114, RAD 120, RAD 121. COREQUISITES: RAD 116, RAD 121. Mode of delivery: hybrid. 1 lecture hour, 2 laboratory hours. Spring semester.

RAD 131 Clinical Internship III (5 cr)
This course is designed to build on the knowledge, skills, and attitudes learned in RAD 111 and RAD 121. Students will continue to develop and demonstrate an increasing degree of competency in the performance of radiographic examinations. Trauma rotations will provide the student with an opportunity to learn from a variety of physicians and radiographers. Students will spend more time in clinical areas improving their technical skills, demonstrating the core values of Mercy in their patient care interactions, and using critical thinking and problem solving methods to produce quality diagnostic images. PREREQUISITES: RAD 101, 104, 110, RAD 114, RAD 116, RAD 120, RAD 121, RAD 130. Mode of delivery: face-to-face. 40 clinical internship hours for 12 weeks, 32 hours for 2 weeks and 24 hours for 1 week. Summer semester.

RAD 202 Radiographic Pathology (3 cr)
Radiographers must understand the effect of trauma and disease on the human body. Through an in-depth study of radiographic pathology, students learn how to adjust technical factors to produce diagnostic images of intricate internal human anatomy. Knowledge of pathological conditions also enables students to care for patients' needs, perform examinations with as little discomfort as possible, and maintain radiation exposure as low as reasonably achievable. Through the development of a portfolio, students will correlate theory to practice and augment their knowledge of the relationship between human pathology and the production of quality diagnostic images. Course delivery involves online activities and proctored examinations. PREREQUISITES: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131. COREQUISITES: RAD 203, RAD 205, RAD 210, RAD 211. Mode of delivery: web based. 3 lecture hours. Fall semester.

RAD 203 Advanced Patient Care (2 cr)
Radiographers are "first on the scene" when trauma patients are brought into a hospital and need to be able to respond quickly to emergency situations. From basic life support to advanced skills for patient assessment, students learn the techniques needed to assist the radiologist and/or emergency medical personnel during the performance of radiographic examinations. Through lecture, simulations, and skills labs, students are challenged to learn these advanced skills needed to care for patients. PREREQUISITE: RAD 101, RAD 104, RAD 110, RAD 111,

RAD 114, RAD 120, RAD 121, RAD 130, RAD 131. COREQUISITES: RAD 202, RAD 205, RAD 210, RAD 211. COREQUISITES: RAD 202, RAD 205, RAD 210, RAD 211. Mode of delivery: web based. 2 lecture hours. Fall semester.

RAD 205 Radiation Physics (3 cr)
Students need to know and understand the responsibilities of operating today's million dollar imaging equipment. Based upon a review of electromagnetic radiation and an in-depth study of electricity and its components, students learn methods needed to operate radiographic equipment within safe limits. In addition, students learn the skills needed to evaluate basic equipment operation and understand the importance to patient care of reporting malfunctions to the proper authorities. Graduates choosing to further their education have a solid foundation to build upon as they pursue advanced specialty areas of the medical imaging sciences. PREREQUISITE: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131. COREQUISITES: RAD 202, RAD 203, RAD 210, RAD 211. Mode of delivery: web based). 3 lecture hours. Fall semester.

RAD 210 Applied Radiography IV (2 cr)
Physicians depend on radiographers to produce diagnostic x-ray images. These images are often the first procedures ordered for the diagnosis of a patient's injury or disease. The purpose of this course is to provide a "real life" atmosphere in the classroom as students use their critical thinking and problem-solving skills to evaluate x-ray images. In a seminar format, x-rays are presented and students are challenged to determine the diagnostic quality and discuss how the images could be improved to reduce repeated examinations. Producing diagnostic images the first time is critical in reducing patient exposure to ionizing radiation. PREREQUISITE: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131. COREQUISITES: RAD 202, RAD 203, RAD 205, RAD 211. Mode of delivery: web based). 2 lecture hours. Fall semester.

RAD 211 Clinical Practicum IV (3 cr)
Students will demonstrate an increased degree of speed, efficiency, and competence when positioning patients for radiographic examinations. Critical thinking and problem solving in the production of quality diagnostic images will be emphasized. Students at this level of the major are in their second year of the major and will exhibit increased independence in their clinical skills. PREREQUISITE: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131. COREQUISITES: RAD 202, RAD 203, RAD 205, RAD 210. Mode of delivery: face-to-face. 24 clinical practicum hours. Fall semester.

RAD 215 Radiation Biology (3 cr)
From Hiroshima and Nagasaki to the Chernobyl disaster, the public is well aware that ionizing radiation is dangerous if not appropriately used by educated and skilled professionals. Radiation exposures must always be kept as low as reasonably achievable with the benefits of an examination outweighing the risks of radiation exposure. This course will provide students with information about the effects of radiation on the human body. Students will explore the history of Radiologic Technology and examine protection methods to assure radiation safety practices. Graduates of the major are expected to know, understand, and utilize radiation protection devices and procedures to protect themselves, the patient, and the healthcare team from unnecessary radiation exposure. PREREQUISITES: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211. COREQUISITES: RAD 220, RAD 221. Mode of delivery: web based. 3 lecture hours. Spring semester.

RAD 220 Applied Radiography V (3 cr)
This course is designed to provide the student with a comprehensive review prior to sitting for the American Registry of Radiologic Technologists (ARRT) National Board Examination. Through

intensive discussions, group activities, and mock registry examinations, students are challenged to organize their studies to determine content areas needing additional reinforcement. PREREQUISITES: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211. COREQUISITES: RAD 215, RAD 221. Mode of delivery:face-to-face (online starting spring 2028).). 3 lecture hours. Spring semester.

RAD 221 Clinical Practicum V (3 cr)
Students at this level of the major are finishing their clinical competency requirements and preparing for graduation from the major. All previous knowledge, skills, and attitudes related to producing quality diagnostic images are reinforced. The core values of Mercy are once again stressed as students prepare to enter the professional workplace. PREREQUISITES: RAD 101, RAD 104, RAD 110, RAD 111, RAD 114, RAD 120, RAD 121, RAD 130, RAD 131, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211. COREQUISITES: RAD 215, RAD 220. Mode of delivery: face-to-face. 24 clinical practicum hours. Spring semester.

REL 301 Comparative Christian Traditions (3 cr)
This course is an in-depth exploration and study of the major Christian theological traditions. Through biblical, theological, historical, and critical analysis, students will be able to compare and contrast the systematic integrity of the various traditions, develop a greater respect for the unity and diversity of faith and practice among Christians, and engage in a lifelong process of discovering and learning truth, growing spiritually, and meaningfully participating in positively shaping their world as individuals and healthcare professionals. Mode of delivery: face-to-face, web-based. 3 lecture hours.

SLP 999 Service Learning Project (0 cr)
In this course students will complete meaningful service to their community. Students will then integrate this service with reflection in order to enhance the students' educational experience.

SOC 102 Sociology (3 cr)
This course surveys the definition, scope, basic concepts and theories of sociology. It examines the scientific approach to the study of society and includes practical application of concepts. Topics include socialization, group formation, deviance, norms, institutions, and social stratification. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall, Spring, and Summer semesters.

SOC 360 Death, Dying, and Bereavement (3 cr)
In this course, students have the opportunity to explore and perhaps, transform their personal death and dying awareness, through education, experiential learning, sharing, and reflection. Topics that are covered include historical and contemporary perspectives on death, dying, and grieving; the dying and grieving process; the emotional and spiritual needs of the dying and grieving individual; cultural influences of the dying and grieving process; death anxiety; and the importance of leaving a life legacy. PREREQUISITE: SOC 102. Mode of delivery: face-to-face, web-based. 3 lecture hours. Summer semester.

SOC 415 A Social Justice Approach to Social Issues (3 cr)
The unequal distribution of benefits and the hardships throughout the world are key contributors to social problems, including those issues that impact health. Using a social justice approach, this course will study domestic and international social issues, including such issues as to poverty, healthcare, globalization, discrimination, and the environment. PREREQUISITE: SOC 102. Mode of delivery: face-to-face, web-based. 3 lecture hours. Spring semester.

SPE 105 Small Group Communication (1 cr)
This course is an introduction to group formation and processes, including strategies of interaction and for the individual as an effective participant/leader in task-oriented groups. Mode of delivery: face-to-face. 1 lecture hour. Fall, Spring, and Summer semesters.

STA 165 Fundamentals of Statistics (3 cr)
This course emphasizes the fundamental principles and methods of statistical analysis in a general context. Descriptive and inferential topics covered include the description and comparison of data, probability, discrete probability distributions, normal probability distributions, estimates and sample size, hypothesis testing, correlation/regression, multinomial distributions, analysis of variance and non-parametric test. PREREQUISITE: None. Mode of delivery: face to face, web based. 3 lecture hours. Fall, Spring, and Summer semesters.

STA 330 Biostatistics (3 cr)
This course emphasizes the principles and methods of statistical analyses for health sciences. Descriptive and inferential topics covered include the description of data, probability, normal distributions, sample distributions, confidence intervals, hypothesis testing, the comparison of two independent or paired samples, categorical data (chi-square, Fisher's test, McNemar's test, etc.), analysis of variance (ANOVA), correlation and regression. Emphasis on understanding and evaluating statistical analysis in published research. PREREQUISITE: MAT or STA 100 or higher-level math course. Mode of delivery: face-to-face, web-based. 3 lecture hours. Fall semester. Spring and Summer terms.

STA 420 Research Methodologies (3 cr)
The purpose of this course is to provide students with a comprehensive understanding of the basic skills needed to conduct research. Course topics will include qualitative and quantitative research methodologies. PREREQUISITE: STA 100 or higher. Mode of delivery: web-based. 3 lecture hours. Summer semester. Spring and Summer terms.

STA 470 Advanced Research (3 cr)
This course utilizes the knowledge and skills obtained in STA 420 Research Methodologies in order to conduct a research project. The research project will be presented in a written and oral presentation. PREREQUISITE: STA420. Mode of delivery: web-based. 3 lecture hours. Spring and Summer semesters.

SVL 285 Servant Leadership (3 cr)
The Sisters of Mercy have been servant leaders throughout the world. We continue their legacy by helping students begin lifelong journeys as servant leaders whose positive influence will extend to homes, communities, workplaces, and nations. Considering Catherine McAuley as our exemplar, students will explore the skills, knowledge, and characteristics necessary to be servant leaders. With a servant's heart, students will work with a community partner to lead a service project that addresses a need in the community. Topics include Mercy history, servant leadership characteristics, listening, working with diverse people, teamwork, accepting responsibility, ill-structured problem-solving, and self-care. Service learning is an integral component for successful completion. Mode of delivery: face-to-face, web-assisted, or web-based. Fall, Spring, and Summer semesters.

Mercy Health Sciences University
2026-2027 Academic Year Tuition and Fee List

University Catalog Appendix A

Tuition and fees listed below are for the **2026-2027** academic year and will apply to each academic period with a start date between **July 1, 2026** and **June 30, 2027**. Tuition for any academic period with a start date outside of this date range will not be governed by this Appendix.

Tuition and fees are subject to change. Changes impacting the current academic year will be reflected in a separate appendix with the effective date prominently disclosed. An Appendix A for each prior and future academic year will be included in each catalog. **Each student will incur and be responsible for paying the tuition and fees disclosed in the Tuition and Fee Appendix A for each respective academic term in which the student is enrolled.**

Regular Tuition

Undergraduate Tuition (amount per credit hour attempted): $770.00

Undergraduate tuition is calculated on a per-credit-hour basis and covers all undergraduate programs and all undergraduate course enrollments **EXCEPT**, courses required to earn the Accelerated Bachelor of Science in Nursing degree, RN-to-BSN Degree, Paramedic certificate and Medical Assistant certificate. The tuition is charged on a per credit hour basis for all hours attempted.

Undergraduate Audit Tuition (amount per credit hour attempted): $193.00

Tuition charged when neither a letter grade nor academic credit is awarded by the University and when enrollment in the course is reflected on the student's transcript. This rate applies to all undergraduate courses except the Accelerated Bachelor of Science in Nursing Degree. See the Academic Policies and Procedures Section of the Catalog for more information.

Accelerated Bachelor of Science in Nursing Tuition (rate per credit hour attempted) $810.00

The Accelerated Bachelor of Science in Nursing (ABSN) program tuition is calculated on a per-credit-hour basis and covers nursing courses which have the naming format NUA-###.

Accelerated Bachelor of Science in Nursing Audit Tuition (amount per credit hour attempted): $203.00

Tuition charged when neither a letter grade nor academic credit is awarded by the University and when enrollment in the course is reflected on the student's transcript. This rate applies to all courses which have the naming format NUA-###. See the Academic Policies and Procedures Section of the Catalog for more information.

Graduate Tuition (amount per credit hour attempted) $441.00

Tuition for all graduate degrees is calculated on a per-credit-hour basis for each graduate level course attempted.

Graduate Audit Tuition (amount per credit hour attempted): $111.00

Tuition charged when neither a letter grade nor academic credit is awarded by the University and when enrollment in the course is reflected on the student's transcript. This rate applies to all graduate courses. See the Academic Policies and Procedures Section of the Catalog for more information.

RN-to-BSN Tuition (amount per credit hour attempted): **$436.00**

The RN to BSN program tuition is calculated on a per credit hour basis and covers nursing courses which use the **NSG-4##** course number format.

Paramedic Tuition (amount per credit hour attempted): **$420.00**

The Paramedic tuition only applies to and covers professional courses required to earn the Paramedic certificate which use the **EMS-###** course number format.

Medical Assistant (MA) Tuition (amount per credit hour attempted): **$420.00**

The MA Program tuition only applies to and covers professional courses required to earn the MA certificate which use the **MA-###** course number format.

NOTE: Any student who is required to or elects to repeat any course will incur tuition charges equal to the number of credit hours repeated at the applicable per-credit-hour rate. Repeating a course is not free.

Certificate Tuition

Emergency Medical Technician Certificate **$1,250.00**

Tuition rate applied when a student enrolls in the Emergency Medical Technician (EMT) course offered on the Mercy Health Sciences University Campus. A student may elect to take this course for academic credit. If a student elects to take the course for credit, the business-office policies which normally govern short-term certificates are not applicable, but instead, all for-credit policies, including tuition and fee amounts will apply.

Critical Care Paramedic Certificate **$1,200.00**

Tuition rate applied for the course leading to the endorsement as a Critical Care Paramedic (CCP). A student may elect to take this course for academic credit. If a student elects to take the course for credit, the business-office policies which normally govern short-term certificates are not applicable, but instead, all for-credit policies, including tuition and fee amounts will apply.

Advanced Emergency Medical Technician Certificate **$1,600.00**

Tuition rate applied when a student enrolls in the Advanced Emergency Medical Technician (AEMT) course. The AEMT certificate is a course where an existing EMT will expand their knowledge, skills, and abilities. The course focuses on emergency care but has content covering medical and traumatic emergencies, adult and pediatric patients, acute and chronic medical conditions, intravenous therapy, and pharmacology. A student may elect to take this course for academic credit. If a student elects to take the course for credit, the business-office policies which normally govern short-term certificates are not applicable, but instead, all for-credit policies, including tuition and fee amounts will apply.

Certified Nurse Assistant Certificate **$1,500.00**

Tuition rate applied when a student enrolls in the Certified Nurse Assistant (CNA) course. Our three-week Certified Nursing Assistant (CNA) program will lay the foundation for your future career in healthcare. Typical responsibilities include bathing, grooming, transferring or rooming patients, and advocating for their concerns to their healthcare providers. A student may elect to take this course for academic credit. If a student elects to take the course for credit, the business-office policies which normally govern short-term certificates are not applicable, but instead, all for-credit policies, including tuition and fee amounts will apply.

Certificate Tuition Notice

Full Payment for all certificate courses is due at the time of registration and is **non-refundable** after the first day of class. Deferred payment plans are not offered by the University for certificate programs. Students are not considered registered until Full Payment is received.

If a student is unable to attend any class, the student has a duty to contact the instructor prior to the class to discuss the matter. If a student fails to attend the first class and has not contacted the instructor prior to the class to obtain permission, the student will be administratively dropped from the class by the University and the amount paid by the student will be refunded. If a student wishes to drop a course and receive a tuition adjustment, the student must submit all completed paperwork to the Registrar on or before the first day of class.

The election to take a certificate course for credit must be made by the student at the time of registration. After the class has started this choice is irrevocable.

Academic Fees

Challenge Examination: **Fee set by & paid to third-party exam administrator**

Students, who believe they are knowledgeable in certain subject areas and wish to receive University credit for this knowledge, may challenge the course by sitting for the Challenge Examination. Not all courses at Mercy Health Sciences University are available for students to challenge. If a CLEP exam is available for a course, the student may only take the CLEP exam. Mercy Health Sciences University will award credit hours through Challenge Examinations provided that the student achieves at least 80 percent on the test in question. The student must pay the Challenge Examination fee to the third-party examination administrator prior to taking the Challenge Examination.

Placement Examination: **Fee set by & paid to third-party exam administrator**

After admission to the University, some professional programs may require the successful completion of a placement exam. The placement examination will be administered for the purpose of appropriately placing the student in the professional program. Placement exams cover various topics, but the most common topics include reading, math, science, and English & language usage. Names of third party exams include ATI TEAS, Accuplacer and Compass. A fee will be assessed by and paid to the third-party exam administrator when registering for the exam and scores will be provided by the exam administrator to the University.

Screening Services Subscription **Fee set by & paid to third-party exam administrator**

To ensure the safety of all students and patients and to meet regulations of our clinical partners regarding student participation in clinical site experiences every student seeking admission to an academic major that includes a clinical, preceptorship, internship, or similar experience with the potential for patient interaction must establish an account with our screening services provider. The screening services provider will initiate a national criminal background check, a dependent adult abuse check, a child abuse check, a 10-panel drug screen and will provide a repository for all documents showing proof all personal health screens, vaccinations and training (e.g. CPR) have been completed by the student. A fee will be assessed by and paid to the third-party administrator and the University will have access to each student's account.

ASN Material Fee (charged terms 1 & 2): **$1,720.00**

Each ASN student will be charged a fee to cover supplies and materials issued or made available to the student to help prepare for successful completion of the NCLEX-RN licensure exam. This fee will cover but is not limited to NCLEX review materials provided online or on paper, supplemental education aids provided online or on paper and any disposable supplies issued to or used by students as part of a nursing course with a lab component. The fee will be charged to each student two times in the amount shown.

BSN Material Fee (charged in terms 1 & 2): **$1,720.00**

Each BSN student (excluding RN to BSN and Accelerated BSN students) will be charged a fee to cover supplies and materials issued or made available to the student to help prepare for successful completion of the NCLEX-RN licensure exam. This fee will cover but is not limited to NCLEX review materials provided online or on paper, supplemental education aids provided online or on paper and any disposable supplies issued to or used by students as part of a nursing course with a lab component. The fee will be charged to each student two times in the amount shown.

Accelerated BSN Material Fee (charged in term 1, module A & term 2, module A): $1,378.00

Each Accelerated BSN student will be charged a fee to cover supplies and materials issued or made available to the student to help prepare for successful completion of the NCLEX-RN licensure exam. This fee will cover but is not limited to NCLEX review materials provided online or on paper, supplemental education aids provided online or on paper and any disposable supplies issued to or used by students as part of a nursing course with a lab component. The fee will be charged to each student two times in the amount shown.

Nursing Program Clinical and Lab Make-up: $150.00

Nursing students who miss a clinical or lab experience and must make it up at a later date will be assessed this fee. The fee must be paid prior to attending the make-up session. If the fee is not paid, the student will be precluded from attending that session.

Allied Health and Liberal Arts and Sciences Clinical and Lab Make-up: $50.00

Students who miss a clinical or lab experience and must make it up at a later date will be assessed this fee. The fee must be paid prior to attending the make-up session. If the fee is not paid, the student will be precluded from attending that session.

Diagnostic Medical Sonography Fee (each term): $250.00

Students enrolled in Diagnostic Medical Sonography major will be assessed a fee each term due to additional costs associated with the major that are not captured in the normal tuition rate.

Paramedic Field Experience Licensing Fee (charged in term 1): $200.00

A fee will be assessed on each paramedic student during the first term of enrollment. The fee covers the additional cost of student licensing fees for testing, scheduling, and competency tracking software.

Radiologic Technology Boot Camp Fee (charged in term 2; see note): $252.00

Students enrolled in the Radiologic Technology major will be charged a fee to cover the cost of review materials and registration to help increase the likelihood of passing the AART Exam. **NOTE**: Starting with the cohort starting the Radiologic Technology program in Summer 2027, the fee will be charged in term 1 instead of term 2.

Administrative Fees

Installment Payment Plan Participation Fee: $40.00

A student may elect to participate in an installment payment plan with the University. In order to enter into an installment payment plan, the student must complete the following on or before the first day of each term: (i) pay 25% of the total tuition and fees due, (ii) pay the participation fee and (iii) execute an installment payment plan agreement. The University will allow the student to pay the remaining balance due in no more than three equal installment payments over the term.

All terms and conditions of the installment payment plan will be stated in the plan document. Students who fail to comply with the terms of an installment payment plan, or who have made a late payment to the University or who have issued a check to the University that has been returned for insufficient funds may be prohibited from entering into an installment payment plan for subsequent terms. Installment payment plans are not available to students enrolled in non-credit certificate courses.

Diploma Replacement: $25.00

A fee is charged for a replacement diploma.

Graduation: **$110.00**

This fee is charged in the final semester of a student's academic certificate, diploma or degree program. If a student will be awarded more than one academic credential during the same commencement ceremony the student will incur only one fee. If a student earns more than one academic credential, but the credentials will be awarded in separate commencement ceremonies, the student will incur a fee for each applicable commencement ceremony. The fee is incurred regardless of whether the student attends the ceremony or not.

Late Fee: **$80.00**

In any term in which Full Payment of all tuition and fees is not received by the due date a late payment will be assessed. See Financial Information section of the University Catalog for more information.

ID Badge Replacement: **$15.00**

A fee is charged to replace a lost or stolen ID badge.

Parking Violations: **$45.00**

A fee may be imposed upon any student who parks in any area on the University main campus or the Mercy Medical Center campus, which is not expressly identified and designated for student use, this includes but is not limited to spots designated as "Employee" and "Guest" spots. In addition, a fee may be imposed upon any student who fails to properly place a valid University parking sticker in his or her car. The University reserves the right to tow any vehicle parked in a manner inconsistent with the provisions of this section.

NOTE 1: Mercy Health Sciences University Students are **not** permitted to park at 921 6th Avenue, also known as ACE and/or University Hill. If you park at 921 6th, Newbury Living (the building owner) will have your vehicle towed. The vehicle owner will be solely responsible for all towing and impound fees.

NOTE 2: Parking in a spot marked for handicapped persons without the proper state-issued permit is a violation of state law. The University will contact the Des Moines Police Department when violations come to our attention. The vehicle owner will be solely responsible for all towing and impound fees.

Impression Fee for Printing and Copying – Black Ink: **5 cents per single-side page**

Students who exceed the allocated quantity of free impressions for copying and printing each term will incur an impression fee. A copy or print request that has content on both sides of the sheet of paper will be charged two impressions.

Impression Fee for Printing and Copying – Color Ink: **15 cents per single-side page**

Students who exceed the allocated quantity of free impressions for copying and printing each term will incur an impression fee. A copy or print request that has content on both sides of the sheet of paper will be charged two impressions. Any copy or printed page that utilizes a colored-ink output device will be charged the colored copy fee for each impression generated by the device regardless of the amount of colored ink used to generate the impression.

Plotter Printer Poster: **$10.00 per poster**

Any member of the campus community who wishes to print a single-sided, 3-foot x 4-foot poster will incur this fee regardless of the ink colors or quantity of ink used.

Returned Check: **$30.00**

A fee is charged each time a student's check is returned, whether for non-sufficient funds (NSF) or any other reason. In the event a check is not honored by the drafter's financial institution and if a subsequent attempt to pay tuition and or fees occurs after the payment deadline, a late payment fee may also be imposed. A student who issues a subsequent check to the University that is not honored by the drafter's financial institution (e.g. a second NSF) may not participate in an Installment Payment Plan.

Transcript: **$10.00**

A fee is charged for each official transcript provided. This fee is charged via a third party.

Application Fee: **$25.00**

A fee is charged to each person submitting an application for admission to the University

Mercy Training Center Courses and Fees

The Training Center offers healthcare continuing education which in general have a duration of 8 hours or less. The Training Center is located on the garden level of the ACE building, 921 6th Avenue, Des Moines, Iowa 50309. A list of current courses, their duration and the associated cost is available at:

https://mchs.enrollware.com/schedule. Course offerings may change from time-to-time without notice.

Full Payment for all Training Center courses is due at the time of registration. Mercy Health Sciences University **does not** issue refunds for Training Center courses, **except** EMT, AEMT, CCP and CNA courses. Instead of issuing refunds, the University allows each student to schedule a same-class registration for a later date at no additional cost, as long as the student submits a cancellation request at least **one business day** before the first day of class. Refunds are offered for EMT, AEMT, CCP and CNA courses as identified in the Certificate Tuition Section above.

At the time of registration you will be provided with a refund notice mirroring the above and you will check a box stating you read and agree to these terms.

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