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### Fall Semester 2014

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<tr>
<td>September 2</td>
<td>First Day of Class</td>
</tr>
<tr>
<td>September 2</td>
<td>Fall Tuition Payment Deadline or Installment Payment Plan Established</td>
</tr>
<tr>
<td>September 8</td>
<td>Last Day to Add a Class</td>
</tr>
<tr>
<td>September 8</td>
<td>Last Day to Drop Classes with Refund</td>
</tr>
<tr>
<td>October 3</td>
<td>Fall Recess - No Classes (Faculty and Staff Professional Development Day)</td>
</tr>
<tr>
<td>October 24</td>
<td>Mid Term</td>
</tr>
<tr>
<td>October 31</td>
<td>Last Day to Drop Classes*</td>
</tr>
<tr>
<td>November 3 - 7</td>
<td>Senior/Junior registration for Spring 2015</td>
</tr>
<tr>
<td>November 10 - 14</td>
<td>Sophomore/ Freshman registration for Spring 2015</td>
</tr>
<tr>
<td>November 27 - 28</td>
<td>Thanksgiving Break (No Classes after 4 pm, Wed. Nov. 26)</td>
</tr>
<tr>
<td>December 13</td>
<td>Last Day of Semester</td>
</tr>
<tr>
<td>December 14 - January 4</td>
<td>Christmas Break</td>
</tr>
</tbody>
</table>

### Spring Semester 2015

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 5</td>
<td>First Day of Class</td>
</tr>
<tr>
<td>January 5</td>
<td>Spring Tuition Payment Deadline or Installment Payment Plan Established</td>
</tr>
<tr>
<td>January 11</td>
<td>Last Day to Add a Class</td>
</tr>
<tr>
<td>January 11</td>
<td>Last Day to Drop Classes with Refund</td>
</tr>
<tr>
<td>January 19</td>
<td>Martin Luther King Jr. Day, No Classes</td>
</tr>
<tr>
<td>February 27</td>
<td>Mid Term</td>
</tr>
<tr>
<td>March 6</td>
<td>Last Day to Drop Classes*</td>
</tr>
<tr>
<td>March 9 - 13</td>
<td>Senior/Junior registration for Summer 2015</td>
</tr>
<tr>
<td>March 15 - 21</td>
<td>Spring Break</td>
</tr>
<tr>
<td>March 23 - 27</td>
<td>Sophomore/Freshman registration for Summer 2015</td>
</tr>
<tr>
<td>April 3</td>
<td>Good Friday (Campus Closes at Noon)</td>
</tr>
<tr>
<td>April 24</td>
<td>Commencement Day</td>
</tr>
<tr>
<td>April 25</td>
<td>Last Day of Semester</td>
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### Summer Semester 2015

#### Summer Professional Program and Liberal Arts and Sciences – 15-Week Semester

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<th>Event</th>
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<tbody>
<tr>
<td>May 4</td>
<td>First Day of Class</td>
</tr>
<tr>
<td>May 4</td>
<td>Summer Tuition Payment Deadline or Installment Payment Plan Established</td>
</tr>
<tr>
<td>May 10</td>
<td>Last Day to Add a Class</td>
</tr>
<tr>
<td>May 10</td>
<td>Last Day to Drop Summer Professional Program and LAS 15-Week Session with Refund</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>May 25</td>
<td>Memorial Day, No Classes</td>
</tr>
<tr>
<td>June 26</td>
<td>Mid Term</td>
</tr>
<tr>
<td>July 2</td>
<td>Last Day to Drop Summer Professional Program and LAS 15-Week Session*</td>
</tr>
<tr>
<td>July 3</td>
<td>Independence Day, No Classes</td>
</tr>
<tr>
<td>July 6 - 10</td>
<td>Senior/Junior registration for Fall 2015</td>
</tr>
<tr>
<td>July 13 - 17</td>
<td>Sophomore/Freshman registration for Fall 2015</td>
</tr>
<tr>
<td>August 15</td>
<td>Last Day of Semester</td>
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**Radiology First Year and Liberal Arts and Sciences – 10-Week Term**

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<tr>
<td>June 8</td>
<td>First Day of Class</td>
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<td>June 8</td>
<td>Summer Tuition Payment Deadline or Installment Payment Plan Established Last</td>
</tr>
<tr>
<td>June 12</td>
<td>Day to Add a 10-Week Session Class</td>
</tr>
<tr>
<td>June 12</td>
<td>Last Day to Drop Radiology Classes and LAS 10-Week Term Classes with Refund</td>
</tr>
<tr>
<td>July 10</td>
<td>Mid Term</td>
</tr>
<tr>
<td>July 17</td>
<td>Last Day to Drop Radiology Classes and LAS 10-Week Term Classes*</td>
</tr>
<tr>
<td>August 15</td>
<td>Last Day of Semester</td>
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*Dates are subject to change.*

* Dropping a class before this date will result in a grade of “W”. Dropping a class 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 College

Catholic Identity Statement

Mercy College of Health Sciences is a Catholic institution of higher education whose purpose is to educate students for service and leadership roles in health care 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 College 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, the College 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 College 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 college community, strive continually to make this vision of our Catholic identity a reality throughout the living and learning environment of the College.

History of Religious Sisters of Mercy (RSM)

The core values of today’s Mercy College of Health Sciences 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 provided their first care 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 College evolved from Mercy School of Health Sciences, a certificate and diploma institution established as a consolidation of the Mercy Schools of Nursing, Radiology and Emergency Medical Services in January 1994. Mercy College of Health Sciences was formed in July 1995. Mercy College is a partner with Mercy Medical Center - Des Moines as a member hospital of Catholic Health Initiatives.
The founding beliefs established by the Sisters of Mercy continues to guide the College as it educates nurses, allied health, and health science professionals in its third century of operation and its second decade as a private accredited institution of higher education. Mercy College encourages an open mind, a desire to comprehend, and a sense of respect for ethnic and cultural diversity.

**Vision**

To be a national leader for excellence in the delivery and innovation of health sciences education.

**Mission**

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

**Values**

Mercy College of Health Sciences 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 College is guided by the five core values:

**Knowledge:** ability to instill in our college 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 Outcomes**

To fulfill its mission, Mercy College of Health Sciences (MCHS) is committed to achieving the following institutional outcomes:

**Knowledge Acquisition, Construction, Integration, and Application**
1. Gains core knowledge and skills to build capacity for life-long learning.
2. Applies knowledge to a new situation or setting.
3. Demonstrates critical thinking.

**Communication**
4. Writes effectively in a variety of forms and settings.
5. Speaks effectively in a variety of forms and settings.
6. Listens to comprehend.
7. Reads to comprehend.
8. Collaborates respectfully with others to accomplish a common goal.

**Servant Leadership**
9. Exhibits personal accountability as a servant leader.
10. Exhibits social accountability as a servant leader.
11. Addresses community, national, and global needs through service.

**Evidence-Based Continuous Improvement**
12. Gains insights through assessment data.
Philosophy of Assessment
Mercy College has a commitment to embed in its culture meaningful, manageable, and sustainable assessment practices to enhance lives. To that end, the college is dedicated to implementing a systematic, continuous process of improvement aligned with its vision, mission, and values.

Philosophy of Distance Education
Distance education supports and enhances the vision of Mercy College of Health Sciences to be a national leader for excellence in the delivery and innovation of health sciences education. Through the use of best practice instructional methods and technologies, distance education at Mercy College provides accessible, high quality educational opportunities that meet the needs of constituents: students, faculty, and the broader healthcare community seeking knowledgeable and skilled healthcare professionals.

Accreditation
Mercy College is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools (HLC-NCA).

The Clinical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

The Diagnostic Medical Sonography Degree Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The Emergency Medical Services Certificate Programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The Medical Assisting Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

The Nuclear Medicine Technology Certificate Program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT).

The RN to BSN program leading to a Bachelor of Science in Nursing Degree Program is accredited by the Commission on Collegiate Nursing Education (CCNE).

The Associate of Science in Nursing and the RN to BSN program leading to a Bachelor of Science in Nursing Degree Programs have approval of the Iowa Board of Nursing (IBON). The BSN program is in the IBON approval process.

The Associate of Science in Nursing Degree Program is accredited by Accreditation Commission for Education in Nursing (ACEN).

The Physical Therapist Assistant Degree Program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

The Polysomnographic Technology Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Commission on Accreditation for Polysomnographic Technologist Education (CoA PSG).

The Radiologic Technology Degree Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

The Surgical Technology Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

The Mercy College Training Center is accredited by the American Heart Association.
Mercy Medical Center—Des Moines is accredited by the Joint Commission on Accreditation of Healthcare Organizations and is a member of the Iowa Hospital Association, the Catholic Hospital Association, and the Mercy Health Network.

**Institutional Memberships**

American College Testing  
Accreditation Review Committee on Education in Surgical Technology  
Alpha Beta Kappa National Honor Society  
American Association of Collegiate Registrars & Admissions Officers  
American Association of Medical Assistants  
American Library Association  
American Society for Clinical Pathology  
American Society of Radiologic Technology  
American Association of Colleges of Nursing  
American Health Science Education Consortium  
American Marketing Association  
American Marketing Association Iowa Chapter  
Association of American Colleges and Universities  
Association of Catholic Colleges and Universities  
Association of College Administration Professionals  
Association of Collegiate Educators in Radiologic Technology  
Association of Governing Boards of Universities & Colleges  
Association of Surgical Technologists  
Catholic Campus Ministry Association  
Catholic College Cooperative Tuition Exchange  
Commission on Accreditation of Allied Health Education Programs  
Commission on Collegiate Nursing Education  
Conference for Mercy Higher Education  
Council for Advancement and Support of Education  
Council for Higher Education Accreditation  
Higher Learning Commission of the North Central Association of Colleges and Schools  
Iowa Association for College Admission Counseling  
Iowa Association of Colleges of Nursing  
Iowa Association of Computing Teachers  
Iowa Association of Independent Colleges and Universities  
Iowa Association of Student Financial Aid Administrators  
Iowa Campus Compact  
Iowa Distance Learning Association  
Iowa Library Association  
Iowa Organization of Nurse Leaders  
Iowa Private Academic Libraries  
Iowa Religious Media Services  
Medical Library Association  
Medical Library Association (Midwest Chapter)  
National Association of College & University Business Officers  
National Association of Independent Colleges & Universities  
National Association of Student Financial Aid Administrators  
National League for Nursing  
National Orientation Directors Association  
National Student Nurses Association  
Quality Matters  
Rotary Club of Des Moines  
The Alpha Eta Society  
The Tuition Exchange, Inc.
Campus

Mercy College facilities include fully equipped classrooms and lecture halls, skills laboratories, student computer laboratories and classrooms, student lounges, and faculty and administrative offices. Clinical instruction is provided at Mercy Medical Center - Des Moines and at various locations in the metropolitan and surrounding areas.

The College Admissions and Student Affairs Departments are located on the first floor of Mercy Court. The Student Success Center is located at the south end of the garden level of Mercy Court. The College’s Clinical Laboratory Science Program faculty offices and classroom facilities are located on the north end of the garden level of Mercy Court. The College’s Emergency Medical Services Program staff, classroom facilities, computer classroom and skills laboratories are located on the first floor of Mercy Crocker. The Clinical Resource Center (nursing skills laboratory) is located on the lower level of the Medical Office Plaza (MOP) Building.

College library resources are located both on the main campus and at Mercy Medical Center - Des Moines. Both locations offer electronic information services as well as books, journals, medical texts, reference materials, compact discs, DVDs, videotapes, and other audiovisual materials.

General Policies

Campus Safety Statement
Mercy College has information available regarding campus crime statistics. This information may be obtained from the College website at http://www.mchs.edu/campus_security.cfm.

Catalog Not a Contract
This catalog is presented as informational only and is not a contract between Mercy College and its students. The information, policies, and procedures contained in this catalog are subject to change at any time with or without notice.

College Information
All College documents contain current pertinent information. Mercy College reserves the right to make changes as necessary, including changes in requirements, programs, policies, and fees. Changes shall go into effect whenever appropriate with such notice as is reasonable under the circumstances.

Completion Rates
Mercy College publishes information concerning student completion rates and performance on professional licensure/certification examinations. This information may be obtained from College admissions staff. Institutional completion rates are available on the College website.

Confidentiality
Mercy College complies with the Family Educational Rights and Privacy Act (FERPA) of 1974 and amendments, which governs access to and release of student academic and financial records. Third party access to non-directory information is not permitted without the student’s written consent, except as allowed by law. At its discretion the institution may provide directory information which is defined as: student name, address, telephone number, date and place of birth, major, dates of attendance, degrees and awards, most recent previous educational institution attended, and participation in College activities. FERPA also recognizes that information can, in case of an emergency, be released without consent when needed to protect the health and safety of others.

Non-Discrimination
It is the Mercy College policy to conduct academic programs and business activities in a manner that is free from discrimination and to provide equal opportunity for and equal treatment of students regardless of race, color, national and ethnic origin, age, sexual orientation, gender identity, religion, creed, physical or mental disability, status as a disabled veteran or veteran of war, or any other factor protected by law.

Furthermore, Mercy College admits students of any race, color, national and ethnic origin, age, sexual orientation, gender identity, religion, creed, physical or mental disability, status as a disabled veteran or veteran of war, or any other factor protected by law in the administration of its educational policies, admissions
policies, scholarship and loan programs, or any other school-administered programs. *(See the Student Handbook for detailed information on Discrimination, Abuse and Harassment Policies and Procedures.)*

**Professional Malpractice/Liability**
Students who are currently enrolled in a Mercy College degree/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 contracted affiliate are covered under the Professional Malpractice Insurance of Mercy Medical Center Des Moines.

**Services for Disabilities**
Mercy College is committed to equality of educational opportunity for all students. The Student Success Center facilitates academic accommodations and services for students with disabilities so students have equal access to College 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 Manager of Student Success in the Student Success Center.

Student Disability Services administered by the Student Success Center include the following:

- Establish and communicate criteria for disability services at Mercy College,
- 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.
Admissions

Admission to the College

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

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 College. Admission into the College is selective and does not guarantee admission into a professional program. Upon being granted general College admission, students may enroll in liberal arts and science education classes in the School of Liberal Arts and Sciences. Each program retains the right to set application deadlines and to limit enrollment. (See professional program sections for program specific admission requirements)

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

Application to College Deadlines

Applications for admission to the College throughout the academic year must be received by the dates shown below. Applications arriving after these deadlines will be rolled forward to the next available academic term. Prospective students have 60 days following the application deadline to submit all official high school and college transcript(s) for their file to be reviewed for admission to the College or their application will be inactivated or if requested rolled forward to the next available academic term. Admission to a specific academic program may have earlier deadlines. (See individual academic program admissions requirements for possible early deadlines.)

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<thead>
<tr>
<th></th>
<th>Application Deadline</th>
<th>Transcript Deadline</th>
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<tbody>
<tr>
<td>Fall Semester</td>
<td>June 15, 2014</td>
<td>July 15, 2014</td>
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<tr>
<td>Spring Semester</td>
<td>October 15, 2014</td>
<td>November 15, 2014</td>
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<tr>
<td>Summer Semester</td>
<td>March 15, 2015</td>
<td>April 15, 2015</td>
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For priority consideration applications should be submitted by the application deadline.

Application to College Procedure

Prospective students must:

1. Complete and submit the online “Application for College Admission” at mchs.edu/apply.
2. Submit official transcripts for all institutions attended (as outlined below) to Mercy College. Prospective students have 30 days upon receipt of their application to submit all required transcripts. If all required transcripts are not received within this timeframe, the prospective student’s application will be inactivated until receipt of all transcripts. Transcripts are considered official only when they are mailed directly from the educational institution to the College and bear the educational 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.
   a. Official high school transcript from an accredited secondary school or its equivalent. For high school students enrolled in college or Advanced Placement (AP) courses, an official transcript from the
college(s) attended and/or the College Board (for AP courses) should be sent to Mercy College. High school transcripts are NOT required for students who have completed an associate’s degree or higher from an accredited college or university unless it is needed to verify program admission requirements. (See professional program sections for program specific admission requirements)

b. Official report of the applicant’s American College Testing (ACT) scores if available.

c. Official General Education Development (GED) scores (if applicable).

d. Official transcripts from each college attended (if applicable).

3. If you have prior military service, submit a copy of the Military Discharge Form (DD214) to the Financial Aid Office. If you are a Selected Reservist, submit a copy of Basic Eligibility (DD2384) to the Financial Aid Office.

4. If English is not your native language and you did not graduate from a U.S. high school you will need to provide either the results from an English as a Foreign Language (TOEFL) test with a score of 530 or higher and taken within the last two years (71 or higher on an Internet-based test or 197 or higher on a Computer-based test) or provide the results of a COMPASS ESL Reading test that shows the achievement of a score of 92 or higher and taken within the last two years or take the COMPASS ESL Reading test and achieve a score of 92 or higher. Prospective students taking the COMPASS ESL Reading test at Mercy College are allowed two attempts to achieve a score of 92 or higher. Prospective students who achieve a COMPASS ESL Reading test score of 91 or lower after two attempts will have the option to enroll as a guest student for RDG 095 only and will not be eligible for college admission for at least one academic semester. Students who successfully pass RDG 095 as a guest student with a C (not C-) or higher will have met the requirement. Students who opt not to enroll in RDG 095 as a guest student will need to provide documentation that outlines their additional efforts to improve their English abilities. These students will be required to take the COMPASS ESL Reading test and achieve a score of 92 or higher in two attempts.

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 College has been met.

Credit by Examination

Mercy College ensures its academic integrity by awarding credit only for successful completion of a college-level course or for specified examination programs. The total combined examination credits cannot exceed 24 credit hours. College 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 or has completed. 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 College 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.collegeboard.com and mailed directly to Mercy College.

Challenge Examinations

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 College 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 College will award a student 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.

College-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 College 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 College will award credit. Official transcripts must be requested
by the prospective students from www.collegeboard.com for CLEP transcripts or www.getcollegecredit.com for DSST transcripts and mailed directly to Mercy College.

**Experiential Learning Credit**
Mercy College does not award Experiential Learning Credit.

**Criteria for Admission to the College**

*(See individual program sections for specific professional program admission information and criteria for admission.)*

Admission will be evaluated according to the appropriate criteria as a first time college student, as a college transfer student, as a high school completion student or as a home school high school student.

1. **First-time college 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 (college credits earned before graduation from high school). A student is also considered a first time college student if they enroll at Mercy College the fall term immediately following high school graduation and earned college 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. (meet one of the criteria):
   a. Have a high school cumulative grade point average of 2.25 or higher; or
   b. Have an ACT composite score of 18 or higher.

2. **College transfer students** - A student who has previously attended a postsecondary institution following high school graduation with at least nine (9) credit hours or more of postsecondary course work. Students with fewer than nine (9) credit hours of postsecondary course work will be considered for admission under #1 First time college student or #3 high school completion. 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.
   a. Must have a cumulative grade point average of at least 2.25 on a 4.0 scale at the last college attended (a minimum of nine (9) credit hours).

3. **High school completion students** – A student seeking admission as a degree candidate who holds an equivalency diploma issued by his/her state department of education.
   a. Earn a General Educational Development (GED) certificate; and
   b. Achieve a standard score of 450 or higher on the GED.

4. **Home school high school students**:
   a. Provide a transcript signed by the students’ 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
   b. Have an ACT composite score of 18 or higher.

Admissions Department personnel will determine if criteria for admission to the College has been met. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admissions, students are encouraged to enroll in liberal arts and science courses in the School of Liberal Arts and Sciences at Mercy College. Prospective students will receive an acceptance status letter from the Admissions Department after the application process has been completed.

**International Students**

Mercy College is not authorized to issue Certificates of Eligibility for Non-Immigrant Students (I-20).
Non-United States Citizens

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

1. Submit certified copy of passport documenting entry to the US.

2. Submit certified copy of official INS document verifying Current Immigration Status (ex: refugee) or Alien Registration Number, Form I551.

3. Submit official secondary and/or college transcripts accompanied by a certified English translation and credit evaluation prepared by a professional transcript evaluation organization. The evaluation must be completed on a course-by-course level.

4. If English is not your native language and you did not graduate from a U.S. high school you will need to provide either the results from an English as a Foreign Language (TOEFL) test with a score of 530 or higher taken within the last two years (71 or higher on an Internet-based test or 197 or higher on a Computer-based test) or provide the results of a COMPASS ESL Reading test that shows the achievement of a score of 92 or higher and taken within the last two years or take the COMPASS ESL Reading test and achieve a score of 92 or higher. Prospective students taking the COMPASS ESL Reading test at Mercy College are allowed two attempts to achieve a score of 92 or higher. Prospective students who achieve a COMPASS ESL Reading test score of 91 or lower after two attempts will have the option to enroll as a guest student for RDG 095 only and will not be eligible for college admission for at least one academic semester. Students who successfully pass RDG 095 as a guest student with a C (not C-) or higher will have met the requirement. Students who opt not to enroll in RDG 095 as a guest student will need to provide documentation that outlines their additional efforts to improve their English abilities. These students will be required to take the COMPASS ESL Reading test and achieve a score of 92 or higher in two attempts.

Post-Admission Procedure for Students Admitted to the College

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

- Attend a New Student Orientation and Registration session. Students in online programs are expected to complete their program orientation online.
- Complete the Emergency Notification and Communication, Multiple Consent Agreement, FERPA Release 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 College 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.

Provisional Admission to the College

Applicants who do not meet college admissions criteria may be granted provisional admission to the College (not to a professional program). Applicants granted provisional admission to the College is required to develop an Academic Support Action Plan with the Student Success Center. 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. Provisional admission status may be removed by achieving a cumulative grade point average (GPA) of 2.0 or higher for a minimum of nine (9) earned credit hours at Mercy College. If a provisionally admitted student fails to achieve a cumulative GPA of 2.0 or higher, the student may be dismissed from the College.

Transfer Credit

Mercy College of Health Sciences accepts courses offered by regionally accredited institutions of higher learning. Courses accepted as transfer credit may apply toward degree requirements and must be of comparable content and length to Mercy College courses. Developmental courses are exempt from this policy unless judged by the Registrar’s Office to be equivalent to those offered at the College and accepted for credit. Mercy College may
Mercy College does not accept transfer credit for PHI 110 Critical Thinking in a Diverse World (3cr), and PHI 280/NSG 280/PST 280 Caring in a Diverse Health Care Environment (3cr), PHI 301 Critical Thinking (3cr), PHI 302 Applied Critical Thinking (3cr) and SVL285 Servant Leadership (3 cr).

Once admitted and enrolled in a program of study at Mercy College students may be permitted to transfer one course of applicable liberal arts and sciences courses from another institution while enrolled in an associate degree program and an additional applicable liberal arts and sciences course after completion of an associate degree program while enrolled in a bachelor’s degree at the College. Students who transfer credit are expected to complete the same degree requirements as students who start at Mercy College.

Each program will establish appropriate time limit restrictions on courses that may be transferred to satisfy program requirements.

**Unclassified Students**

Mercy College defines unclassified students (sometimes also referred to as guest students) as non-degree/certificate-seeking students. Students wishing to take courses for academic credit, but who do not wish to seek a degree/certificate are welcome to enroll for non-clinical classes at Mercy College with the permission of the instructor and on a space available basis. They must 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 (thirty) credit hours may be earned as an unclassified student. All unclassified students are encouraged to attend a New Student Orientation & Registration Session. Unclassified students are not admitted to Mercy College and are not eligible for financial aid.

All course prerequisites and College policies apply to unclassified students. Students who have been denied admission are not eligible to enroll as unclassified students. Unclassified students are held to the same academic and behavior standards as degree-seeking students. Unclassified students will pay the regular College tuition and fees and a transcript and grade are generated.

An unclassified student may seek admission to the College and to a degree/certificate program at any time. They must complete an application for admission and meet the criteria for admission.

**Orientation and Professional Program Day**

**New Student Orientation and Registration Session and Professional Program Day**

All new students to Mercy College are required to attend an Orientation and Registration session prior to their first semester. The session introduces students to college life, provides information about services and resources, and teaches skills for student success. Students may register for their first semester classes at this time. Students who are admitted to an academic program are required to attend Professional Program Day prior to their first program course. For online degree programs, orientation and Professional Program Day may be offered in an online format.
Financial Information

Tuition and Fees are found on the Mercy College website: [http://www.mchs.edu/tuition-and-fees.cfm](http://www.mchs.edu/tuition-and-fees.cfm).

Financial Assistance

Federal and State Programs

Federal financial aid programs are available to qualifying students enrolled in any Mercy College associate or bachelor degree and qualifying certificate programs. State funds are 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. It is recommended that this be done at [www.fafsa.gov](http://www.fafsa.gov). Mercy College’s Financial Aid Office will receive the FAFSA information electronically from the Federal Government provided the student uses Mercy College’s school code (006273) when completing the FAFSA.

Iowa Grants
The Iowa Grant is awarded to high-need Iowa residents. *(Subject to funding)*

Iowa Tuition Grant
The Iowa Tuition Grant is based on financial need, with priority given to applicants with the greatest need. Applicants must be residents of Iowa, as defined by the Iowa State Board of Regents, be pursuing associate or bachelor’s degree, and submit their FAFSA by July 1. *(Subject to funding)*

Pell Grant
The Pell Grant is a federal grant awarded to high financial need students. Pell grants are not awarded to individuals who have earned a bachelor’s degree or higher.

Stafford Loans
Eligibility for a Federal Stafford Loan is determined after grants and scholarships are awarded to the student and are limited to the total cost of education for the year. For current interest rates, origination fees, and other loan information, visit [www.studentloans.gov](http://www.studentloans.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. 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 college. 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 college, but interest begins to accrue at the time the loan funds are disbursed.

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 Student Work-Study Program provides financial assistance as well as the opportunity to broaden one’s educational experience. Students receive bi-weekly checks. Work-study positions are limited and subject to availability and financial need.

Veterans Educational Benefits
Mercy College certificate and degree programs 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 College should apply for VA benefits at the time of admission to Mercy College. Please contact the Registrar’s Office with questions or for necessary forms. Benefit Application can also be completed online at [www.va.gov](http://www.va.gov). The application process for new claims takes a minimum of eight weeks to complete by the VA.
Mercy College participates in both the Yellow Ribbon Program and the Military Spouse Career Advancement Accounts (MyCAA) Program.

Packaging of Federal and State Financial Aid

1. Priority consideration will be given to admitted students whose completed FAFSA is received 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 College 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 College 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 College and pursuing a qualified academic program.
6. Financial Aid is initially awarded based on full-time enrollment. Aid will be adjusted based on the number of actual registered credits.
7. If a student is taking academic credits at another institution while attending Mercy College, 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 College encourages all students to contact their human resources department to learn what options are available to support their educational goals.

Mercy Medical Center - Mercy Scholars Program - Employees, spouses and legal dependents may be eligible for tuition assistance for specifically identified educational programs while attending Mercy College (up to 100% of the tuition expense, based on length of employment). This is a Mercy Medical Center – Des Moines program and you must refer to Mercy Scholars Tuition Reimbursement Corporate Policy on MercyNet for full details or contact the Mercy Medical Center – Des Moines, Human Resources Department.

Catholic Health Initiative (CHI) Tuition Reimbursement - Employees eligible for CHI benefits, whether full-time or part-time and who are in good standing may be eligible for CHI tuition reimbursement. This is a CHI program and you must refer to HR/Payroll Connection within the InsideCHI website for full details.

Financial Aid Satisfactory Academic Progress Standards

Students receiving federal and/or state funded aid are required to make satisfactory academic progress (SAP). This is a different policy than the College Academic Performance Policy.

Students are required to maintain a 2.00 cumulative GPA. Students must also complete (with a D- or above) 67% of cumulative attempted credit hours applied to their program including all courses taken at Mercy College of Health Sciences. For financial aid SAP, attempted hours include completed courses as well as courses with a grade of F, W, or I, and repeated courses.

Students who do not meet these requirements at the end of a semester may be granted one warning semester of continued financial aid eligibility. After the warning semester, students will be placed on financial aid suspension and lose their financial aid eligibility until the SAP requirements are met. Students may appeal their financial aid suspension by completing the appeal form available in the Financial Aid Office.

For financial aid purposes students must complete their program of study within 150% of the published length of the educational program.

Scholarship Programs

Mercy College and donor designated scholarships administered by the Department of External Affairs, with the assistance of Mercy Foundation of Des Moines, are available beginning March 1 for fall funding and on a limited
basis, October 1 for spring funding. Applications must be submitted to the Department of External Affairs by the
date noted online. Students are not eligible to receive more than one scholarship in a 12-month period for the same
scholarship even if it remains available for application twice a year.

Applicants are able to submit a single application for a series of similar scholarships. Several different group
applications will be available for various categories of scholarships. To support each application, students will need
to submit a typewritten essay and in most cases one letter of recommendation from someone who can attest to the
applicant’s demonstration of the defined Mercy College values. 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.

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 the elimination of the application
from committee review. Students receiving scholarships will be recognized in the community through publicity
generated by the College. Students concerned about their confidentiality should contact the College Marketing staff
at the time of the award to discuss planned announcements.

Scholarship committees generally include faculty representatives, alumni, Mercy Medical Center -- Des Moines
staff members, and friends of the College.

Business Office

The financial policies published in this catalog are current at the time of publication. However, they are subject to
change from time to time.

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 classes taken for credit. The
College will attempt to bill each student approximately one month prior to the start of the term. If a bill is not
received by the student, the student has the obligation to contact the Business Office to request a billing statement.
Failure to receive a bill does not exempt any student from the obligation to make Full Payment by the due date.

Full Payment of all tuition and fees must be made at the time of registration for short-term certificate
programs.

Full Payment occurs when: (i) the College 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
programs) 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 College must have received the funds or receive confirmation from the issuing entity that the funds will be
paid to the College.

Failure to make Full Payment by the due date will result in a late payment charge being assessed. Also, any student
who has not fulfilled his or her financial obligation may be dropped from all classes. At the College’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.

Method of Payment

Mercy College 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.
Tuition Adjustment Policies

If a student drops a class or classes or withdraws from the College, it is possible under certain circumstances, that the tuition and fees charged by the College 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 College. Tuition adjustments are dependent upon many factors, including but not limited to the date of the change, course load, enrollment status, credit hours, and method of payment. 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 College 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 College 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.

<table>
<thead>
<tr>
<th>Class Duration</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes running 15 weeks or longer</td>
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</tr>
<tr>
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<td>5 calendar days from the Session Start Date</td>
</tr>
<tr>
<td>Classes running less than 10 weeks</td>
<td>3 calendar days from Session Start Date</td>
</tr>
<tr>
<td>Non-credit Short-term Certificates &amp; Paramedic Courses</td>
<td>First day of class</td>
</tr>
</tbody>
</table>

Tuition is considered fully earned by the College 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 Short-term Certificate and Paramedic Courses

For non-credit short-term certificate courses and Paramedic courses, tuition is non-refundable if the drop occurs after the first day of class. Therefore, a student who wishes to drop any class in these programs and 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 College

Full Adjustments

Withdrawing from the College is defined as ending enrollment in all classes during a term. A student officially withdraws from the College 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 College Registrar to answer questions related to academic credit. Please refer to the Admissions Section of this Catalog or consult the College Admissions Department to answer questions related to readmission.

The College allows students to withdraw from the College 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 College 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.

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</tr>
<tr>
<td>Non-credit Short-term Certificates</td>
<td>First day of class</td>
</tr>
</tbody>
</table>

Prorated Adjustments

Any student taking classes for credit (excluding Paramedic classes) who withdraws from the College 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 College are not eligible for an adjustment to tuition after the 7th calendar day of each term. All tuition and fees are 100% earned after the 7th calendar day.

Non-credit Short-term Certificate students are not eligible for prorated tuition refunds. All tuition is considered fully earned for the non-credit short-term certificate students 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.”

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 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 Short-Term Certificate Classes - No refunds or tuition adjustments will be made to the accounts of short-term certificate students. However, if a medical withdrawal is necessary, the short-term certificate student must follow the medical withdrawal policy set forth in the Student Handbook. If the short-term certificate 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 he or she 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 Student Handbook. If a military withdrawal is granted, a grade of “W” will be awarded for each course from which the student withdraws.

Non-Credit Short-Term Certificate Classes - No refunds or tuition adjustments will be made to the accounts of short-term certificate students. However, if a military withdrawal is necessary, the short-term certificate student must follow the military withdrawal policy set forth in the Student Handbook. If the short-term certificate student follows the military withdrawal policy and a military withdrawal is granted the student will be allowed to re-enroll in the same class from which he or she withdrew at 50% of the then-current cost if the student re-enrolls in the class or 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.

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 he or she is ordered to duty select one of the following three options:

1. The student may withdraw from the College and receive a full refund of tuition and mandatory fees for that term.
2. The student may make arrangements with the College 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.
3. The student may make arrangements with the College 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 College, 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 College 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 Short-Term Certificate Classes** - No refunds or tuition adjustments will be made to the accounts of short-term certificate students. However, if the short-term certificate 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 Allied Health and the instructor of the class or classes. If the application is approved, the student will be allowed to re-enroll in the same class or classes from which he or she 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 six 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 whose application is not approved, the student will receive the grade earned as determined by the instructor(s).

**Return of Title IV Funds**

If a student withdraws from all classes or is dismissed from the College 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.

Students will be notified if they are required to repay federal or state funds (grants and/or loans). 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 College is required to return any unearned portion of Title IV funds that have been used to pay tuition, any outstanding balance due Mercy College 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 College Business Office.

**Short-term Certificate Information**

Full Payment for all short-term certificate courses is due at the time of registration and is non-refundable after the first day of class. Installment payment plans are not offered by the College for short-term 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 or the Short-Term Certificate Program Coordinator prior to the class to discuss the matter. If a student fails to attend the first class and has not contacted the instructor or the Short-Term Certificate Program Coordinator prior to the class to obtain permission, the student will be administratively dropped from the class by the College and the amount paid by the student will be refunded.

**Short-term Certificate versus Course Credit**

Each student may elect to enroll in certain short-term certificate programs and receive college credit. The election to take the course for college 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 short-term certificate courses for credit, the business-office
policies which normally govern short-term certificates 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 College may elect at its full and complete discretion to send the student’s account to a collection agency. Any collection costs incurred by the College will be charged to the student’s account.

**Due Dates for Tuition and Fees**

Tuition for all programs offered by the College is due on or before the first day of each term. Please consult the College 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 College 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.

**Explanation of Fees**

**Academic Fees**

**Challenge Examination**

All Challenge Examination fees must be paid prior to taking the exam. Applicants may not retake these challenge examinations.

**LAS Challenge Examination:** Students may challenge selected liberal arts and sciences courses. *(See Admissions section)*

**LPN Challenge Examination:** Student seeking advanced placement in the ASN program because they hold an LPN license may take the NLN Nursing Acceleration Challenge Exam (ACE) PN-RN-Foundations of Nursing Exam.

**LPN Clinical Skills Challenge:** Students seeking advanced placement in the ASN program because they hold an LPN license who have passed the written portion of the NLN Nursing Acceleration Challenge Exam (ACE) PN-RN-Foundations of Nursing Exam may take the Clinical Skills Challenge Exam.

**Clinical Make-up**

Students who miss a clinical day 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 Registry Examination Preparation Fee**

Students enrolled in the Diagnostic Medical Sonography Program who register for DMS-125 will be charged a fee for all materials and related costs associated with registering and preparing for the National Registry Exam.
Diagnostic Medical Sonography Fee
Students enrolled in Diagnostic Medical Sonography Program will be assessed a fee each term due to additional costs associated with that program that are not captured in the normal tuition rate.

Medical Assisting Certification Exam Preparation Fee
Students enrolled in the Medical Assisting Program who register for MA-201 will be charged a fee for all materials and related costs associated with registering and preparing for the AAMA Certification Exam.

Nuclear Medicine Technology Fee
Students enrolled in the Nuclear Medicine Technology Program will be assessed a fee each term due to additional costs associated with that program that are not captured in the normal tuition rate.

Nursing Material Fee
All Nursing Students, except those enrolled in the RN to BSN Completion Program will be charged a fee in each term to cover supplies and materials that will be issued to the student that will help prepare the students for successful completion of the NCLEX-RN licensure exams.

Placement Examination
A fee will be assessed when a placement examination is administered to a readmitted student, or to a student transferring professional program courses from another institution. The placement examination will be administered for the purpose of appropriately placing the student within the program sequence of courses. (See professional program information to ascertain if a program permits transfer program courses.)

Polysomnographic Material Fee (1st - 3rd Term)
These fees, per term, covers the additional materials that will be issued to each student during the first term of the Program.

Radiologic Technology Certification Exam Preparation Fee
Students entering the 6th term of the Radiologic Technology program will be charged a fee to cover materials needed to prepare for the ARRT National Board Examination.

Radiologic Technology Material Fee (1st Term)
Students entering the 1st term of the Radiologic Technology program will be charged a fee to cover supplies and materials that will be issued to the student.

Surgical Technology Lab Supply Fee
Student enrolled in the Surgical Technology Program will be charged a fee in the term SUR-101 is taken for laboratory costs not captured in the normal tuition rate.

Surgical Technology Certification Exam Fee
Students enrolled in the Surgical Technology Program will be charged a fee in the SUR-161 summer term course. This fee will cover the certification preparation, professional membership and certification exam.

Administrative Fees

Installment Payment Plan
A student may elect to participate in an installment payment plan with the College. 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 listed in the Administrative Fee Section found earlier in this section and (iii) execute an installment payment plan agreement. The College will allow the student to
pay the remaining balance due in three equal installment payments. The three installments will be due on or before the following dates:

**Fall Term:**
- 1st Installment due October 1
- 2nd Installment due November 1
- 3rd Installment due December 1

**Spring Term:**
- 1st Installment due February 1
- 2nd Installment due March 1
- 3rd Installment due April 1

**Summer Term (NOTE: the first day of the term for all summer classes is the first day of the 15-week term):**
- 1st Installment due June 1
- 2nd Installment due July 1
- 3rd Installment due August 1

The full terms of the installment payment plan will be stated in the plan document. Students who have failed to comply with the terms of any prior installment payment plan with the College, or who have made a late payment to the College or who have issued a check to the College that has been returned for insufficient funds may not be allowed to participate in an installment payment plan. Installment payment plans are not available to students enrolled in a short-term certificate program.

**Diploma Replacement**
A fee is required from students wishing to obtain a replacement diploma.

**Graduation**
A fee is charged in the final semester of a student’s academic program to cover the costs associated with graduation activities and is required from all graduating students, whether the student attends the ceremony or not.

**ID Badge Replacement**
A fee is required to replace a lost or stolen ID badge.

**Late Payment**
A fee will be assessed when a payment deadline is missed.

**Parking Violations**
A fee will be imposed upon any student who parks in any area located on the main campus of the College, Mercy Court, Crocker Street, or the Mercy Medical Center campus, which is not expressly identified and designated for student parking. In addition, a fee will be imposed upon any student who fails to properly place a valid College parking sticker in his or her car.

**Impression fee for Printing and Copying**
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.

**Returned Check**
A fee is charged each time a student’s check is returned, whether for non-sufficient funds or any other reason. The amount of the returned check plus the fee must be paid with cash, money order, or certified funds. Payment of such funds after payment deadlines will result also in late payment fees being assessed. A student who issues a check to the College that is subsequently returned also may not participate in the Installment Payment Plan.

**Transcript**
A fee is charged for all official transcripts provided for any persons not currently enrolled at Mercy College. Transcripts are provided at no charge for currently enrolled students, but are provided only if the student’s account is free of business or other holds.
Student Life

The Student Affairs Office coordinates activities designed to convey the mission of the institution. From gaining an understanding of the selfless devotion to patient care offered by Sr. Mary Zita Brennan to understanding the historic traditions of this institution, student experiences at Mercy College will be filled with events that bring to life the core values of Mercy.

Student Affairs staff are committed to facilitating students’ transition into college and helping students gain leadership skills through their involvement. The Student Handbook identifies all of the opportunities available at the College.

Student Success Center

The Student Success Center (SSC) provides students with opportunities to enhance their education through academic advising, career development, personal counseling, tutoring services, testing accommodations for students with a disability, and other academic support services. The SSC was designed to provide free services to help students who may need additional support during their academic experience.

Student Communication Tools

MyMercy
MyMercy is the College’s online tool for viewing academic and administrative records. Students can use MyMercy to view academic records such as course schedules, unofficial transcripts, grades, and degree audits. MyMercy is also used to register for classes. The web link to MyMercy may be found on the College homepage or at http://mymercy.mchs.edu.

Online Course Management System
E-LEOS is the College’s online course management system and is the communication vehicle to announce policy changes, announcements, and other important information. The web link to E-LEOS may be found on the College home page or at http://mercy.angellearning.com.

Student Email Account
All students are provided a Mercy College email account. This email account is the official method for the College to communicate with students. Students are expected to check their College email accounts on a regular basis. The web link to Mercy College email may be found on our home page or at http://webmail.mchs.edu.

Library Resources

Mercy College Library provides a quality collection of print, audiovisual, and electronic resources to support the coursework and research of students, faculty, and the wider community. In addition to the College Library, patrons have access to resources at four additional Mercy libraries through a shared catalog of holdings: Levitt Medical Library at Mercy Medical Center—Des Moines, the Cancer Center Library, Mercy Family Resource Library, and the Emergency Medical Services Reference Library. Access to online resources is available from the College Website and through the course management system.

The library facility has group study rooms, individual carrels, and open study areas to meet a range of preferences. Computer workstations are available to access the Internet, online library catalog, journal databases, interactive CD-ROMs, DVDs, and academic software. A wireless network provides guest access to the Internet.

Library staff members assist all learners with reference questions, research help, and information literacy instruction to individuals and groups. Interlibrary loans are available through resources sharing networks offering access to millions of volumes held by libraries worldwide. Students also have access to materials at more than 600 libraries across the state through the College’s participation in Iowa’s Open Access Program.

Computer Resources

Mercy College provides the use of computer workstations in several public computer labs that serve the information technology needs of students. Students have access to equipment and applications that are essential for educational and work-related experiences. MyMercy, the student information website, allows students to access schedules,
grades, unofficial transcripts, course and degree planning tools, registration, and other tools that facilitate their enrollment and progression.

**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 school’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 our College family. Whether experiencing a retreat activity, a community building event, participating in one of our community service projects or praying together in our chapel, Campus Ministry offers opportunities to explore one’s spirituality and develop one’s faith.

**Student Organizations**

- The Alpha Eta Society
- Alpha Beta Kappa National Honor Society
- The American Association of Sleep Technologists
- American Academy of Sleep Medicine
- American Association of Sleep Technologists
- American Society of Clinical Laboratory Science
- American Society of Clinical Laboratory Science – Iowa
- American Society for Clinical Pathology
- The American Society of Radiologic Technologists
- The Association of Medical Assistants
- The Association of Surgical Technologists
- AST National Honor Society
- Campus Ministry Team
- Iowa Association of Nursing Students
- Iowa Sleep Society
- Iowa Society of Ultrasound
- Sigma Theta Tau International Honor Society of Nursing
- Science Club
- Student Senate
- The Society of Diagnostic Medical Sonography
- The Society of Nuclear Medicine Technology

**Housing Options**

Students in need of housing are free to find housing wherever they desire, but may wish to specifically consider the following two options.

**Mercy Court** – The Fourth Floor of this facility is for Mercy College students. Students are invited to apply for housing in either 1- or 2-person housing units.

**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 College. Contact Drake West Village by visiting them on the web at [www.drakewestvillage.com](http://www.drakewestvillage.com).
Mercy Child Development Center

Mercy’s Child Development Center is conveniently located across the street from Mercy Medical Center—Des Moines and accepts children of employees and students on a regular or drop-in basis depending on availability.

Student Handbook

The Student Handbook is a vital resource containing necessary student information available on the Mercy College website. Students are responsible for reading and following the information contained in the handbook. Each student is required to sign a form stating that they have received the web address of the document and will abide by the policies and procedures contained within it.

The Student Handbook is presented as informational only and is not a contract between Mercy College and its students. The information, policies, and procedures contained in the Student Handbook are subject to change at any time with or without notice.
Academic Policies & Procedures

The following academic information is important. It is the student’s responsibility to read, understand, and follow these policies.

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, a faculty advisor is assigned to each student. Students should meet with their academic advisors each semester to plan their program 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 should 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 pre-requisites, and obtain registration approval. The academic advisor will provide students with their assigned online registration date and time. Students register for classes using MyMercy. Changes to their registration may be made through MyMercy until the start of the term or prior to the course start for courses that begin after the first week of the term.

Add/Drop Classes

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:

1. Students may not enroll in a course after the first full week of the term or equivalent period for shorter courses without instructor permission.
2. 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.
3. All changes in course schedules must be approved by the student’s advisor.
4. 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.
5. 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.

**Cancellation of a Course**

Mercy College reserves the right to cancel a course. Students will receive a full refund for the course.

**Attendance**

Students are expected to be punctual, attend, and actively participate in all class, laboratory, clinical sessions, preceptorships, and internships for which they are registered. There are no exceptions to this rule unless specifically addressed by the instructor at the beginning of each course. Students must verify their course enrollment by attending class(es) the first week of each term. Students enrolled in online courses must have meaningful 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 and Provost, or the Vice-President of Enrollment Management and Student Affairs may administratively withdraw a student in situations when he/she has never attended class, has established attendance but has current prolonged absences, or has exceptional circumstances preventing him/her from attending class or coming to the College to complete a withdrawal form. Exceptional circumstances might include:

1. Extreme medical situation in which the student is unable to initiate the withdrawal process. In such cases the Vice-President of Enrollment Management and Student Affairs initiates the withdrawal process.

2. 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 College. In such cases the Vice-President of Enrollment Management and Student Affairs, with the approval of the Vice-President of Academic Affairs, initiates the withdrawal process.

**Grading**

Mercy College uses the following grading system to monitor student progress:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality Points</td>
<td>4.0</td>
<td>3.7</td>
<td>3.3</td>
<td>3.0</td>
<td>2.7</td>
<td>2.3</td>
<td>2.0</td>
<td>1.7</td>
<td>1.3</td>
<td>1.0</td>
<td>0.7</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Special Grades**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>*0.0</td>
<td>Audit (no credit)</td>
</tr>
<tr>
<td>E</td>
<td>*0.0</td>
<td>Credit by Examination/Validation (Course credit given for successful examination completion or documented equivalency.)</td>
</tr>
<tr>
<td>Special Grades</td>
<td>Quality Points</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>I</td>
<td>*0.0</td>
<td>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 of the Vice-President of Academic Affairs and Provost 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.</td>
</tr>
<tr>
<td>P</td>
<td>*0.0</td>
<td>Pass (Met course requirements successfully as determined by the instructor. Is not calculated in GPA.)</td>
</tr>
<tr>
<td>W</td>
<td>*0.0</td>
<td>Withdrawal from a course before the end of the week following the College mid-term.</td>
</tr>
<tr>
<td>Repeated Course</td>
<td>*0.0</td>
<td>Repeated Course is indicated on the transcript with the notation that it is the same as the department and number of the repeat.</td>
</tr>
</tbody>
</table>

*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 Student Academic Complaint Procedure found in the Student Handbook.

**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 College 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 College are used to calculate a student’s cumulative GPA. GPA is calculated to the thousands decimal place.

**Passing/Failing Liberal Arts and Sciences Courses**
Liberal arts and sciences (LAS) required program courses are considered failed courses unless a grade of “C” or higher (not “C-“) is earned. LAS elective courses not required for a program are considered failed courses if a grade of “F” is earned. (See Program Promotion Policy section)

**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 he/she earns a “C-” or below unless it is a required liberal arts and sciences or professional course in their program of study. 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 transcript. 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 College by repeating the course at another institution nor will the GPA calculations be changed as a result of transferring a course to Mercy College.

**Academic Performance**

The academic records of all students are reviewed at the end of the fall, spring, and summer semesters 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 College. To be considered in “good standing” with the College, 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 program, academic record, or academic eligibility for financial aid. These minimum academic standards may or may not meet other federal requirements.

**Academic Warning**

Students will receive a written academic warning at the end of any semester in which their term GPA falls below a 2.1 and their cumulative GPA remains at or above 2.0. While students may be in good standing with the College, 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. Probation Status 1 remains in effect for one semester. Students are required to develop an Academic Support Action Plan with the 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 who improve their cumulative GPA by earning a term GPA of 2.0 or above, but fail to raise their cumulative GPA to the minimum standard will be placed on Probation Status 2.
- Students who earn a term GPA below 2.0 at the end of this probationary term will be dismissed from the College.

**Probation Status 2**

Students who are not dismissed from the College after Probation Status 1 but fail to improve their performance to be removed from probation are placed on Probation Status 2. These students are required to develop an Academic Support Action Plan with the 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 who improve their cumulative GPA by earning a term GPA of 2.0 or above, but fail to raise their cumulative GPA to the minimum standard will be placed on Probation Status 3.
- Students who earn a term GPA below 2.0 at the end of this probationary term will be dismissed from the College.

**Probation Status 3**

Students who are not dismissed from the College 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 are required to develop an Academic Support Action Plan with the 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 dismissal from the College.
• 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 College.

Graduation

Students earning an associate's degree or a bachelor’s degree must complete all Core Curriculum, program degree requirements and the following institutional requirements:

1. Service Learning Project (see in following section, Student Academic Requirements and Institutional Outcomes)
2. Communication Competency for Writing (see in following section, Student Academic Requirements and Institutional Outcomes)
3. Communication Competency for Speech (see in following section, Student Academic Requirements and Institutional Outcomes)
4. Critical thinking test (see definition of critical thinking in following section, Student Academic Requirements and Institutional Outcomes)
5. Program Portfolio (if applicable) by their intended graduation date (see specific academic program requirements)
6. Complete the Core Curriculum requirements (see in following section, Student Academic Requirements and Institutional Outcomes)
7. Complete program requirements.

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

Graduation Residency Requirements

Students completing a certificate (not short-term certificate) or graduating with an Associate Degree must complete a minimum of 15 credit hours at Mercy College.

Students graduating with a Bachelor’s Degree must complete a minimum of 30 credit hours at Mercy College.

Further details of graduation requirements are found within the program specific sections.

Application for Graduation

Students must complete an Application for Graduation form when registering for the semester prior to the semester of their intended graduation. Verification of eligibility shall be determined by the Registrar and the student’s academic advisor. Graduating students are encouraged to attend commencement.

Students must complete the graduation requirements listed in the College Catalog in effect at the time of initial registration after admission to the College. They may, however, opt to follow requirements in the current catalog.

A conferred degree and official transcripts are issued after fulfillment of all graduation requirements, including clearance through all College departments e.g. Library, Business Office, Financial Aid, etc.

Honors

Graduation Honors

Mercy College recognizes the outstanding achievement of its graduates by awarding the following graduation honors:

Recipients of the Bachelor’s Degree

*Summa Cum Laude.* Have earned a cumulative GPA of 3.8 or higher.

*Magna Cum Laude.* Have earned a cumulative GPA of 3.650 to 3.799 inclusive.

*Cum Laude.* Have earned a cumulative GPA of 3.500 to 3.649 inclusive.

Recipients of the Associate's Degree

*Highest Honors.* Have earned a cumulative GPA of 3.8 or higher.

*High Honors.* Have earned a cumulative GPA of 3.650 to 3.799 inclusive.

*Honors.* Have earned a cumulative GPA of 3.500 to 3.649 inclusive.
Recipients of Certificates
Certificate Highest Honors. Have earned a cumulative GPA of 3.8 or higher.
Certificate High Honors. Have earned a cumulative GPA of 3.650 to 3.799 inclusive.
Certificate Honors. Have earned a cumulative GPA of 3.5 to 3.649 inclusive.

Students must complete 30 credit hours at Mercy College to be a recipient of Associate’s Degree honors or Certificate honors and must complete 60 hours at Mercy College 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 College 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 College and who are enrolled in six or more credit hours are eligible.

President’s List
Students who earn a semester GPA of at least 3.75 and do not have incomplete grades are placed on the President’s List.

Dean’s List
Students who earn a semester GPA between 3.50 and 3.749 and who do not have incomplete grades are placed on the Dean’s List.

Academic Leave and Readmission to the College
Readmission to the College after Voluntary Leave
Students who are not enrolled at Mercy College for a period of 3 or more consecutive semesters must reapply for admission to Mercy College. An Application for Readmission must be made through the Student Affairs Office. The catalog under which a student is readmitted to the College will govern the graduation requirements for that student. Readmission to the College does not guarantee admission or readmission to an academic program.

Medical Withdrawal
Medical Withdrawal is available for students who, because of serious physical or psychological illness or injury, need to leave the College during a semester or during a program. Readmission is subject to the policies set forth above. (See Student Handbook for policy and procedures)

Military Leave
Military Leave is available for students called to active duty in the United States Armed Services. Readmission is subject to the policies set forth above. (See Student Handbook for policy and procedures)

Veterans returning after military leave to perform military service will be readmitted at the same academic status achieved when last in attendance at Mercy College provided the absence does not exceed five years.

Readmission to the College after Academic or Disciplinary Dismissal
Students who have been dismissed for disciplinary or academic reasons may petition for readmission to the College. The Petition for Readmission is submitted to the Student Affairs Office. Readmission to the College 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 College 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 College.
• Educational goal(s)
• Past academic difficulties and/or disciplinary actions and the steps taken to address these difficulties
• If dismissed for disciplinary issues, plans for adhering to MCHS policies and procedures
• 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.

Readmission to the College does not guarantee readmission to an academic program. The student must meet all admission requirements for the specific academic program and apply for the program if readmitted to the College. Students who are expelled from the College may not be readmitted.

Withdrawal from the College

Students who withdraw from the College must complete a College 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 from the College or a program for medical reasons will be considered for readmission according to the readmission policies.

Services for Students with Disabilities

Mercy College is committed to equality of educational opportunity for all students. The Student Success Center facilitates academic accommodations and services for students with disabilities so that those students have equal access to College 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 Manager of Student Success.

Disability Services include:
1. Establish and communicate criteria for disability services at Mercy College;
2. Review documentation to verify eligibility for disability services;
3. Facilitate academic accommodations for qualified students with disabilities; and
4. Support disability-related services and opportunities for students with disabilities.

Academic Accommodation

Academic accommodations are provided on a case-by-case basis. The Manager of Student Success 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 his/her 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 Manager of Student Success to initiate the interactive process to provide reasonable academic accommodations.

Student Work Policy

Clinical students in an Allied Health or Nursing program may be employed by a clinical affiliate in some capacity, but not in the scope of practice of their educational program.

1. Employment hours and clinical hours must be clearly separated.
2. Students must wear clinical student uniforms and student identification name badge while at the affiliate site during clinical program time and may not wear clinical student uniforms and student identification name badge while working as an employee at the clinical affiliate.
3. Students may not receive compensation during clinical hours, but they may receive compensation for working as an employee at the clinical affiliate.
4. Students may not perform in the role or scope of practice of their educational program unless under the supervision of the assigned clinical instructor or preceptor.
Student Complaints

Academic
A student complaint must be in writing and state all of the relevant facts upon which it is based, the policy or procedure involved, and the relief sought. A student complaint should be submitted to the Student Affairs Office and follow the Student Academic Complaint Procedure as stated in the Student Handbook.

Student’s formal, written complaints about academic issues are retained by the Vice-President of Academic Affairs and Provost. These records, including information about the disposition of the complaints handled internally and/or those filed with external agencies for final resolution, will be available for review by agencies that accredit Mercy College. These procedures comply with Federal Title IV regulations.

Students disputing an academic decision, including final grades, affecting their academic records, may grieve the decision by following the Student Academic Complaint Procedure as stated in the Student Handbook.

Non-academic and Non-disciplinary
A student complaint is limited to: 1) a dispute or difference regarding the interpretation or application of established policies or procedures or 2) addressing an issue for which the College does not have an established policy or procedure. This complaint process is for non-disciplinary and non-academic complaints. A student complaint must be in writing and must set forth all of the relevant facts upon which it is based, the policy or procedure involved, and the relief sought. Follow the Student Complaints- Non-academic and Non-disciplinary procedure as stated in the Student Handbook.

Student Academic Requirements and Institutional Outcomes

Credit Hour Explanation
Mercy College of Health Sciences 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: 1 hour/60min. 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 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.

The definition also recommends that for each hour in the classroom, there are approximately two hours of associated work outside the classroom calculated as indicated in the following samples for didactic course work:

- A one credit course that meets 1 hour a week would expect approximately 2 hours of course related time outside of class. This would equate to a total of three hours a week or 45 hours a term dedicated to the course.
- A 3 credit course would then require 9 hours a week or 135 hours a term dedicated to that single course.
- A student carrying a 12 credit hour course load should expect to spend approximately 36 hours a week and approximately 540 hours per term focused on their course work.
- A student carrying an 18 credit hour course load should expect to spend approximately 54 hours a week and approximately 810 hours per term focused on their course work.

Student Academic Load Expectation
Didactic courses equate to having one credit hour associated with a 50 minute clock hour and is calculated as indicated in the credit hour definition. For all didactic courses the average student workload for one credit hour would be one hour of direct teacher interaction plus two hours of outside work related to the course or the
equivalent. At Mercy College, a three credit hour didactic course would require an average commitment of 112.5 hours per term: 50/60 hours x 9 hours class x 15 weeks/term = 112.5 hours/term (modified equation from above example). This definition is consistent with the U.S. Department of Education’s expectation.

Laboratory courses are calculated as two clock hours of course work for each credit hour in class plus one hour of outside work per week. At Mercy College a one credit hour lab course would require an average commitment of 37.5 hours for the term: 50/60 hours x 3 hours x 15 weeks/term = 37.5 hours/term.

Clinicals, practicums, internships, and similar type courses using the clock hour are calculated on a 3:1 ratio or three hours of in-course experience per credit hour plus one hour outside work or the equivalent. A three credit clinical course would require an average of nine hours clinical experience plus three hours of outside work per week for the term or 150 hours of dedicated time per term: 50/60 hours x 12 hours x 15 wk = 150 hours/term.
Critical Thinking

There are many methods and models of investigation, problem solving, and thinking critically. Undoubtedly students coming to Mercy College of Health Sciences have become accustomed to using the scientific method. While at the College students will continue to explore and participate in these methods of investigation and develop a practice of thinking critically.

Peter A. Facione (2013) says that critical thinking is thinking that has a purpose (proving a point, interpreting what something means, solving a problem). In efforts to facilitate clarity and consistency in student learning, the College has acknowledged the fundamental definition and components to critical thinking as a guide for faculty and students (as outlined below).

“Purposeful, reflective judgment which manifests itself in reasoned consideration of evidence, context, methods, standards, and conceptualizations in deciding what to believe or what to do” (Facione, 2012).

<table>
<thead>
<tr>
<th>Core Critical Thinking Skills</th>
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</thead>
<tbody>
<tr>
<td><strong>Skill</strong></td>
</tr>
<tr>
<td>Interpretation</td>
</tr>
<tr>
<td>Analysis</td>
</tr>
<tr>
<td>Inference</td>
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<tr>
<td>Evaluation</td>
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<tr>
<td>Explanation</td>
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<tr>
<td>Self-Regulation</td>
</tr>
</tbody>
</table>

Communication Competency Requirement

The Communication Competency Requirement (CCR) identifies quality standard expectations for writing and oral communication for all degree seeking students at Mercy College. Students will complete oral and written CCR requirements within their program as part of their graduation requirements.

Rubrics and criteria used to determine whether criteria have been met are found in the E-LEOS Student Course and are also discussed during college orientation. The competencies consist of one oral communication and one written communication. The competencies will be completed in a designated course(s) in each program. 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 to complete the writing competency. In the event that a student does not demonstrate competency on the oral communication assignment designated a CCR in that program, the student will work with faculty for other opportunities to complete the graduation 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 College includes a Service-Learning component within its curriculum.

Mercy College of Health Sciences Definition of Service-Learning - Service Learning is an experiential learning opportunity that mutually benefits the provider and recipient of service, enhances academic objectives, meets a community-defined need and encourages a college-wide culture of service. These goals are accomplished through specified project objectives, 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 regards 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 communication with community members, agencies, groups, and organizations.

All Associate or Bachelor degree-seeking students are expected to participate in at least 15 hours of Service-Learning in order to receive their degree. Depending on a student’s specific professional program requirements, these 15 hours will be completed by students in one of the following ways:

- Faculty-Facilitated Project: A professional program and/or college-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 program advisor) working with a community or faith-based organization.
- A combination of both of the above options.

Students are responsible for turning in all of the required paperwork – regardless of the type of project – to the Drop box on the Service Learning E-LEOS Course or to the Student Affairs office in order to receive graduation credit. More detailed information can be found within a student’s E-LEOS login at http://mercy.angellearning.com through the Service Learning Course.

General Education Core Curriculum

The General Education Core Curriculum reflects the educational and ethical beliefs of the core values intrinsic to Mercy College. The Mercy College 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 program specific curricula, provides the foundation for Mercy College students to become productive global citizens and future industry leaders.

General education, embodied in the college Core Curriculum, includes all levels of undergraduate education. Servant Leadership is a signature course for upper level students, is required of all students, and cannot be transferred into the college from other institutions. Courses taken to fulfill one area of the Core cannot be used in another area of the Core.

Outcomes 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
1. Students will be able to integrate knowledge from natural scientific principles to solve problems.
2. Students will be able to utilize reasoning to evaluate scientific theories related to the natural sciences.
3. Students will be able to test hypotheses with scientific rigor

**Math** - Courses in this category will encompass the theory and application of math principles
1. Students will be able to draw conclusions through the use of appropriate mathematical methods.
2. Students will be able to apply mathematical principles as they relate to real world problems.

**Social Science** - Courses in this category will encompass the study of society and social relationships as they relate to human behavior
1. Students will be able to compare and contrast social science theories as they relate to human behavior and social systems.
2. Students will be able to apply social science knowledge to their personal and professional life.

**Composition** - Courses in this category will encompass writing for inquiry, learning, thinking, and communicating in academic, professional and social settings.
1. Students will demonstrate understanding of writing as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate sources, and as a process that involves composing, editing, and revising.
2. Students will demonstrate knowledge of logical and concise methods of written communication including strategies of persuasion and analysis, research, and methods of documentation.

**Speech/Interpersonal Communication** - Courses in this category will encompass the use of effective communication through dialogue, presentations and active listening.
1. Students will prepare and deliver oral presentations using professional words, tone, and nonverbal language.
2. Students will communicate and respond appropriately using verbal and nonverbal techniques (personally and professionally, among peers in their professional role).

**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.
1. Students will be able to describe the value of diverse forms of human expression.
2. Students will be able to evaluate contrasting theories and methodologies of various disciplines within the humanities.
Cultural Appreciation and Diversity - Courses in this category will encompass the respect and celebration of individual and cultural values with the recognition that each is unique.

1. Students will be able to identify methods of collaboration with diverse individuals, groups, organizations, and systems to accomplish a common goal.
2. Students will be able to demonstrate an understanding of human behavior and/or expression.

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.

1. Students will be able to describe the social, cultural, and civic aspects of their personal identities in relation to being a servant leader.
2. Students will be able to demonstrate knowledge, skills, and attitudes needed to become an inspirational servant leader in today’s rapidly evolving and diverse environment.

The Core Curriculum requirements are as follows.

CERTIFICATE REQUIREMENTS
All Certificate programs will take a 4 ½ hour Servant Leadership workshop.
- Short Term Certificate (Certificate of completion) No Core courses – Must take Servant Leadership Workshop
  - EMT
  - CCP
- Certificate of Licensure (National/State mandated curriculum) No Core courses – Must take Servant Leadership Workshop
  - Paramedic (36)
- Long Term Certificate (Certificate of Graduation) Must take minimum of 4 credits of Core Curriculum & Servant Leadership Workshop
  - Medical Assisting (43)
  - Surgical Technology (44)
- Certificate Must take Servant Leadership Workshop
  - Nuclear Medicine (40) Core met through pre-req
  - Clinical Laboratory Science (41) Core met through pre-req

ASSOCIATE DEGREE REQUIREMENTS
Core Curriculum – Associates: 29 credit hours
* During the transition of the BSN degree, the ASN degree will follow the stated curriculum. Refer to the School of Nursing section.

Natural Science and Math (7) Required credits
- Natural Science with lab (4)
- Math (3)
Social Science (3) Required credits
Communication (7) Required credits
- Communication (6)
- Speech (1)
Humanities (3) Required credits
Science Elective (Natural or Social) (3) Required credits
Core Elective (3) Required credits
Servant Leadership (3) Required credits
### Bachelor's Degree Requirements

**Core Curriculum – Bachelors: 41 credit hours**

Natural Science and Math (13) Required credits
- Natural Science (7)
- Math (3) 100 level or higher
- Math (3) 300 level or higher

Social Science (6) Required credits

Communication (7) Required credits
- Communication (6)
- Speech (1)

Humanities (6) Required credits
- Philosophy or Religion (3)
- Humanities (3) 100 level or higher

Cultural Appreciation and Diversity (3)

Required Credits Elective Science (Natural or Social) (3)

Servant Leadership (3) Required credits

### Core Domains

**Natural Science and Math**

**Natural Science**
- **BIO 101** General Biology I (with Lab) (4 cr)
- **BIO 102** General Biology II (with Lab) (4 cr)
- **BIO 180** Human Anatomy (with Lab) (4 cr)
- **BIO 185** Human Physiology (with Lab) (4 cr)
- **BIO 203** Microbiology (with Lab) (4 cr)
- **BIO 302** Pathophysiology (3 cr)
- **BIO 320** Genetics (with Lab) (4 cr)
- **BIO 360** Immunology (3 cr)
- **BIO 400** Pathogenic Microbiology (with Lab) (3 cr)
- **BIO 410** Advanced Anatomy (with Lab) (4 cr)
- **BIO 450** Histology and Embryology (with Lab) (4 cr)
- **BIO 460** Cell and Molecular Biology (3 cr)
- **CHE 101** General Chemistry I (with Lab) (4 cr)
- **CHE 102** General Chemistry II (with Lab) (4 cr)
- **CHE 320** Organic Chemistry I (with Lab) (4 cr)
- **CHE 321** Organic Chemistry II (with Lab) (4 cr)
- **CHE 420** Biochemistry (with Lab) (4 cr)
- **NTR 205** Nutrition (3 cr)
- **NTR 300** Applied Nutrition (3 cr)
- **PHA 202** Pharmacology (3 cr)
- **PHY 101** Physics I (with Lab) (4 cr)
- **PHY 102** Physics II (with Lab) (4 cr)

**Math**
- **MAT 102** Math for General Studies (3 credits)
- **MAT 120** College Algebra (3 cr)
- **STA 330** Biostatistics (3 cr)

**Social Science**
- **PSY 101** General Psychology (3 cr)
- **PSY 202** Developmental Psychology (3 cr)
- **PSY 240** Gerontology and Aging (3 cr)
- **PSY 303** Abnormal Psychology (3 cr)
- **PSY 410** Social Psychology (3 cr)
- **SOC 102** Sociology (3 cr)
<table>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>Death, Dying, and Bereavement</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 415</td>
<td>Social Justice Approach to Social Issues</td>
<td>3 cr</td>
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<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
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<td>SPE 105</td>
<td>Small Group Communication</td>
<td>1 cr</td>
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<tr>
<td>ART 120</td>
<td>Art Appreciation</td>
<td>3 cr</td>
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<tr>
<td>ENG 335</td>
<td>Literature and Medicine</td>
<td>3 cr</td>
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School of Allied Health

Philosophy

In accordance with the mission and objectives of Mercy College, the School of Allied Health currently offers selected associate of science degrees and certificate education programs. The primary purpose of the school is to offer quality degree and certificate education programs, providing students opportunities to develop expertise, scientific knowledge, and professional attitudes that will prepare them for careers in dynamic and growing health care professions. Skills, attitudes, and knowledge are integral components in the delivery of quality health care. Each program focuses on a specific aspect of health care and adheres to standards and guidelines established in collaboration with the appropriate accrediting agency.

The School of Allied Health degrees and programs combine general education with program specific curricula to provide an education foundation for students to become global citizens and future industry leaders. Students in the School are provided an environment conducive to personal and professional development. Faculty have the responsibility to coordinate and provide learning experiences and ongoing evaluative feedback while being responsive to the individual learning needs of students. Students receive personal attention from faculty who know them as individuals, and work closely with them in class and clinical rotations. Program curricula provide students with learning experiences needed to become caring and competent health care professionals and critical thinkers. Clinical facilities provide learning experiences utilizing state-of-the-art technology.

General School Policies

The following policies apply to all academic programs within the school:

Failed Course Policy

Students failing (“C-” or lower) one program course (a course within the program curriculum) may be dismissed from the program or delayed promotion based on program/curriculum structure. Failure of two program courses in the same semester will result in dismissal from the program. Students dismissed from a program will need to apply for readmission to the program or application for a different program.

Incomplete Grade Policy

Students who are unable to complete a program requirement within a semester because of extenuating circumstances and are students in “good standing” may request an Incomplete grade. The program chair/coordinator or appropriate Dean will determine if the student is able to be promoted to the next semester with an outstanding “I” incomplete grade. Students with an “I” incomplete grade in a prerequisite course(s) will not be promoted to the next semester. Students with an “I” incomplete grade in a clinical course may be promoted depending on the reason for the “I” incomplete grade. At the discretion of the instructor, deadlines for satisfying an Incomplete grade can be from a few days to 30 calendar days after the end of the semester in which the incomplete grade occurred. Students will be required to pay a clinical make up fee. (Fees are found on the Mercy College website: http://www.mchs.edu/ tuition-and-fees.cfm.)

National Background Check and Electronic Health Records as Post Admission Requirement for Academic Programs

To ensure the safety of all clients served by Mercy College students and to meet regulations of our clinical partners regarding student participation in clinical site rotations as determined by the 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 program that includes a clinical, preceptorship, internship, or similar experiences 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 program with clinical, preceptorship, or internship opportunities, students will be required to establish an account with CertifiedBackground.com and provide the necessary fees directly to the vendor, in order to conduct these checks and collect these health records in order to finalize admission to the academic program. 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 program or remain in the academic program.
who are unable to fulfill the clinical standards of the profession may also not be able to be admitted to that specific academic program.

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 College) or as part of the information supplied to the vendor at the time of admission to an academic program may also result in a denial of admission to the academic program.

A student’s background is checked based on information obtained from the student’s residency history. When the College 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 College Background Check Review Committee. Students who have a criminal record may be denied admission to an academic program. 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 College 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 College. 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 program. In cases where a licensure/certification board does grant permission to eventually test for certification/licensure following successful graduation from a Mercy College academic program, the College makes no stipulations on the ability of the student to find employment within the certification/licensure career field.

**Post-Academic Program Admission Procedure**

Once applicants have been notified of their provisional admission to an academic program within the School of Allied Health, a student must, by the dates stated in the provisional admission letter:

1. Initiate a criminal background and a child and adult abuse check with [CertifiedBackground.com](http://CertifiedBackground.com) along with the required payment to the vendor. The student must authorize [CertifiedBackground.com](http://CertifiedBackground.com) to provide the results of these checks as part of the final verification for admission to the academic program.

2. Complete documentation needed on immunizations located on the Profile Tracker at CertifiedBackground.com. It is advised to submit the Immunization form to your primary health care provider as soon as possible in order to ensure its completion in advance of the academic program admission deadline established by the Program Chair. The Immunization form verifies compliance with the following:
   a. Two-step TB skin testing done within the past year; then a TB Skin test yearly after admission. If a positive PPD or history, a negative chest x-ray report.
   b. Begin the Hepatitis B series or a positive Hepatitis B Surface antibody titer, or provide a letter from student’s physician stating need for exemption.
   c. Measles, mumps, rubella (MMR vaccine) two doses or titers of all three diseases showing full immunity.
   d. Chicken Pox (Varicella): proof of disease by physician documentation or a positive titer or two doses of Varicella vaccine.

3. Complete the Clinical Standards form located on the Profile Tracker at CertifiedBackground.com. The Program Chair may, at their discretion, also require proof of seasonal flu vaccination prior to participation in courses that include a clinical rotation during flu season.

4. Submit proof of completion and current certification to the Profile Tracker at CertifiedBackground.com in American Heart Association CPR for the Health Care Provider (including adult, infant, child, 1 and 2 rescuer CPR, AED, and use of a Bag-Valve Mask), if applicable.

5. Attend a Professional Program Day session.

6. Program Chairs may require additional pre-admission documentation, at their discretion, that will be located on the Profile Tracker at CertifiedBackground.com. Deadlines for completion will be noted on the Tracker.

Students who fail to complete any of the program post-admission procedures may delay or end the enrollment process and their provisional program admission status may be revoked.
Promotion Policy for Certificate and Associate Degree Programs

To be promoted to the next semester, students must:

1. Complete all course work (Allied Health programs required liberal arts and sciences and professional education courses) as stated in the curriculum plan for the current semester with a grade of “C” or higher (not “C-”).
2. Maintain a GPA of 2.0 each semester.
3. Complete all clinical requirements for the semester.

Based on satisfactory or unsatisfactory completion of the promotion standards, students will be promoted to the next semester, or dismissed from the program. The student may also be subject to Academic Dismissal from the College. Students dismissed from a program but are not dismissed from the College may continue taking liberal arts and sciences courses at Mercy College. They may also qualify to apply for readmission to their program of study or admission to another program of study.

Readmission to Allied Health Program

To be readmitted to an Allied Health program, a student must meet all program admission criteria and take placement examinations to determine semester/course placement. In addition, an open seat in the class must be available.
Clinical Laboratory Science Certificate

Mission Statement
The Clinical Laboratory Science (CLS) Program prepares graduates for service and leadership in the health care community by integrating its core values of knowledge, reverence, integrity, compassion, and excellence with a professional education.

Purpose
The CLS Program is dedicated to providing students with the educational foundation required to become clinical laboratory scientists/medical laboratory scientists through an intensive classroom and clinical curriculum. Guided by the mission of Mercy College, the philosophy of the School of Allied Health and in compliance with the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) Standards for Accredited and Approved Programs including the Unique Standards for the Medical Laboratory Scientist, the primary purpose is to facilitate the personal and professional development of students. The CLS Program provides students with the academic and clinical experiences needed to become caring, ethical, and competent members of the health care team.

Goals
1. Prepare individuals to become laboratory professionals who perform a great variety of laboratory analysis accurately, timely, and efficiently.
2. Develop professionals who think logically, creatively, critically, responsively, and exercise good judgment.
3. Prepare individuals to become leaders in clinical laboratory science/medical laboratory science and the health care community.

Objectives
Upon completion of the Clinical Laboratory Science Program, the graduate will:
1. Perform complex analyses of body fluids, cells, and other specimens; recognize and confirm abnormal results; integrate data; interpret findings; verify quality control; maintain instrumentation; and develop, modify and evaluate procedures for collection, processing and analysis.
2. Recognize problems, identify causes, synthesize alternatives, and select and implement solutions.
3. Create and maintain pre-analytical, analytical and post-analytical records and other documents using laboratory and other information systems; demonstrate effective communication skills; and evaluate research studies.
4. Supervise and manage personnel and the complete workings of a clinical laboratory including develop, evaluate and select new techniques, instruments and methodologies; delegate responsibilities; work as a team member; and possess a comprehensive view of the organization.
5. Apply the principles of educational methodology when designing, implementing and evaluating teaching and learning experiences, provide leadership in education of others, and maintain continuing education as a function of personal growth.
6. Practice a kind and caring attitude toward all individuals and demonstrate a capacity for calm and reasoned judgment and commitment to the patient at all times.

Admission Requirements
To be considered for admission to the Clinical Laboratory Science Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to this professional program.
1. Achieve a minimum cumulative GPA of 2.5 on a 4.0 scale in college-level course work overall as well as in the sciences.
2. Complete before enrollment:
   a. Sixteen (16) semester hours of Chemistry, including Biochemistry and/or Organic Chemistry that are part of a science major curriculum.
   b. Sixteen (16) semester hours of Biology, including Immunology and Microbiology that are part of a science major curriculum.
   c. Three (3) semester hours of college level mathematics e.g. college algebra or above.
i. 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.

3. Earn a grade of “C” (not “C-”) or higher in all required courses.

4. Qualified students may be from an affiliated or non-affiliated institution.
   a. The following institutions are affiliated with the Mercy College CLS program:
      i. Bemidji State University
      ii. Drake University
      iii. Grand View University*
      iv. Luther College
      v. Minnesota State University – Mankato
      vi. Mount Mercy College
      vii. North Dakota State University
      viii. Northwest Missouri State University
      ix. Wartburg College
      x. Winona State University
         * Affiliation currently being finalized
   b. Students from affiliated institutions who have completed three years, or equivalent, of undergraduate work are eligible to complete the fourth year at the Mercy College CLS program.
      All coursework, other than the clinical laboratory science courses, required by the academic institution toward a Bachelor’s Degree, must be completed by the student prior to beginning the CLS program.
   c. 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.

5. Submit the Clinical Laboratory Science Program application materials including:
   a. Mercy College of Health Sciences Application
   b. Official college transcripts from all institutions attended
   c. Three references
      i. The applicant will provide reference forms to the evaluators. The form can be found here: http://www.mchs.edu/pdf/admissions/referencesForm.pdf
      ii. Evaluators will place the reference form in an envelope, sign the seal and return to the applicant or mail directly to Mercy College. At affiliated universities where the application process is coordinated by the academic advisor, the evaluators may return the references directly back to the academic advisor.
      iii. 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.
      iv. References from relatives are not acceptable.

6. Complete an interview with the Program Chair. This interview is scheduled after all other documents have been received.

7. The following courses although recommended are not required and will not exclude the student from consideration for acceptance into the program. Applicants may consider taking them in preparation for the CLS program.
   a. Parasitology
   b. Genetics
   c. Physiology
   d. Hematology
   e. Immunohematology
   f. Quantitative Analysis
   g. Analytical Chemistry
   h. Statistics
   i. Computer Science
   j. Management and Human Relations
   k. Instrumentation
Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

Program Application Deadlines

Complete applications including all required items for CLS program admission must be received in the Admissions Department by October 15 for priority consideration. Prospective students have until November 15 to schedule and complete an interview with the program chair. If the interview is not completed, the application will not be considered for admission to the program and reapplication for the next available academic term is required. Admission to the CLS Program will be announced by December 1.

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<tr>
<th>Program Application &amp; Transcript Deadline</th>
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<td>Fall Semester</td>
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<td>November 15</td>
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Admission into this program is on a competitive basis. Meeting the minimum admission criteria does not guarantee admission into this program. Admission into Mercy College does not guarantee admission into this program.

The Clinical Laboratory Science Program does not offer advance placement.

Clinical Standards

The following clinical standards are required of Mercy College CLS students. These abilities are based on job requirements for clinical laboratory scientists at Mercy Medical Center—Des Moines, the site of most clinical experiences in the CLS program. Applicants must review the following clinical standards to determine their ability and compatibility with the requirements of clinical 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, descending stairs.
- **Feeling**: Perceiving the nature of the veins by touching the skin with the fingertips.

Physical Demand Requirements

Exerts up to 50 pounds of force occasionally and 10-20 pounds frequently to store and retrieve supplies and manipulate testing equipment.

Visual Acuity Requirements

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

Intellectual and Emotional Requirements

- Ability to maintain both a high standard of courtesy and cooperation in dealing with co-workers, patients and visitors and satisfactory job performance within the stress of a hospital work environment.
- Adaptability to accepting responsibility for the direction, control, or planning of an activity.
- Adaptability to situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint.
Adaptability to influencing people in their opinions, attitudes, or judgments about ideas or things.
Adaptability to making generalizations, evaluations or decisions based on sensory or judgmental criteria.
Adaptability to making generalizations, evaluations or decisions based on measurable or verifiable criteria.
Adaptability to dealing with people beyond giving and receiving instructions.
Adaptability to 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.
Adaptability to situations requiring the precise attainment of set limits, tolerances, or standards.
Adaptability to performing a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.

Tools/Equipment
Automated analyzers, Centrifuge, Microscope, Pipetting devices, Flow cytometer, Laminar flow hood, Computers, Telephone, Phlebotomy 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 Certificate
Successfully complete all course work in both didactic and clinical portions of the program with a grade of “C” or higher (not “C-“).
1. Complete the College residency requirement of 15 credit hours.
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete a practice certification exam.
4. 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).
CLS Program Curriculum Guide

Program Required Liberal Arts and Science Courses
SVL Servant Leadership Workshop

Major Program Requirements
CLS 411 Clinical Immunology Didactic (1 cr)
CLS 412 Clinical Immunohematology Didactic (2 cr)
CLS 414 Urinalysis, Body Fluids, and Microscopy (1 cr)
CLS 416 Clinical Chemistry Didactic (4 cr)
CLS 418 Clinical Laboratory Management Didactic I (1 cr)
CLS 432 Clinical Immunohematology and Immunology Clinical Rotation I (2 cr)
CLS 433 Clinical Hematology, Urinalysis, Body Fluids and Microscopy Clinical Rotation I (2 cr)
CLS 435 Clinical Microbiology Clinical Rotation I (2 cr)
CLS 436 Clinical Chemistry Clinical Rotation I (2 cr)
CLS 442 Clinical Microbiology Didactic I (4 cr)
CLS 444 Clinical Hematology Didactic I (3 cr)
CLS 448 Clinical Laboratory Management and Education Methods Didactic II (1 cr)
CLS 462 Clinical Immunohematology and Immunology Clinical Rotation II (2 cr)
CLS 463 Clinical Hematology, Urinalysis, Body Fluids and Microscopy Clinical Rotation II (2 cr)
CLS 465 Clinical Microbiology Clinical Rotation II (2 cr)
CLS 466 Clinical Chemistry Clinical Rotation II (2 cr)
CLS 472 Clinical Microbiology Didactic II (2 cr)
CLS 474 Clinical Hematology Didactic I (2 cr)
CLS 478 Clinical Laboratory Management and Education Methods Didactic III (3 cr)
CLS 485 Phlebotomy (1 cr)

Total Credits: 41

Recommended Courses Sequence

Semester I (Fall)
CLS 411 Clinical Immunology Didactic (1 cr)
CLS 412 Clinical Immunohematology Didactic (2 cr)
CLS 416 Clinical Chemistry Didactic (4 cr)
CLS 418 Clinical Laboratory Management Didactic I (1 cr)

Three of the following:
CLS 432 – Clinical Immunohematology and Immunology Clinical Rotation I (2 cr)
CLS 433  Clinical Hematology, Urinalysis, Body Fluids and Microscopy Clinical Rotation I (2 cr)
CLS 435  Clinical Microbiology Clinical Rotation I (2 cr)
CLS 436  Clinical Chemistry Clinical Rotation I (2 cr)
Total Credits: 14

Semester II (Spring) Option I
CLS 433 OR CLS 435 OR CLS 436 (course not taken in Fall) (2 cr)
CLS 442  Clinical Microbiology Didactic I (4 cr)
CLS 444  Clinical Hematology Didactic I (3 cr)
CLS 448  Clinical Laboratory Management and Education Methods Didactic II (1 cr)
CLS 462 OR CLS 465 (2 cr)
CLS 485  Phlebotomy (1 cr)
Total Credits: 13

Semester II (Spring) Option II
CLS 433 OR CLS 435 OR CLS 436 (course not taken in Fall) (2 cr)
CLS 442  Clinical Microbiology Didactic I (4 cr)
CLS 444  Clinical Hematology Didactic I (3 cr)
CLS 448  Clinical Laboratory Management and Education Methods Didactic II (1 cr)
CLS 463 OR CLS 465 (2 cr)
CLS 466  Clinical Chemistry Clinical Rotation II (2 cr)
Total Credits: 14

Semester III (Summer) Option I
CLS 414  Urinalysis, Body Fluids, and Microscopy (1 cr)
CLS 463  Clinical Hematology, Urinalysis, Body Fluids and Microscopy Clinical Rotation II (2 cr)
CLS 466  Clinical Chemistry Clinical Rotation II (2 cr)
CLS 462 or CLS 465 (course not taken in Spring) (2 cr)
CLS 472  Clinical Microbiology Didactic II (2 cr)
CLS 474  Clinical Hematology Didactic I (2 cr)
CLS 478  Clinical Laboratory Management and Education Methods Didactic III (3 cr)
SVL  Servant Leadership Workshop
Total Credits: 14

Semester III (Summer) Option II
CLS 414  Urinalysis, Body Fluids, and Microscopy (1 cr)
CLS 462  Clinical Immunohematology and Immunology Clinical Rotation II (2 cr)
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<td>CLS 472</td>
<td>Clinical Microbiology Didactic II</td>
<td>(2 cr)</td>
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<tr>
<td>CLS 474</td>
<td>Clinical Hematology Didactic I</td>
<td>(2 cr)</td>
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<tr>
<td>CLS 478</td>
<td>Clinical Laboratory Management and Education Methods Didactic III</td>
<td>(3 cr)</td>
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<td>CLS 485</td>
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Total Credits: 13

**Total Credits: 41**
Associate of Science in Diagnostic Medical Sonography

Purpose

The Associate of Science in Diagnostic Medical Sonography (ASDMS) 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 College, the philosophy of the School of Allied Health 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 impart knowledge, skills, and attitudes needed to care for the sick, produce quality diagnostic images, and pursue life-long learning.

Objectives

Upon completion of the Diagnostic Medical Sonography Associate Degree, the graduate will be able to:

1. Integrates pertinent patient data in order to draw accurate conclusions about diagnostic results.
2. Demonstrates effective interpersonal skills with patients and other members of the health care team.
3. Provides health care guided by the Mercy Core Values that promotes patients’ physical and psychological well-being.
4. Complies with recognized ethical and legal standards of the diagnostic medical sonography profession.
5. Performs physician-ordered sonographic procedures correctly.
6. Maintains optimal functioning of ultrasound equipment
7. Applies knowledge of special procedures to assist a physician in ultrasound-guided examinations.
8. Documents accurate results of diagnostic data to facilitate physician interpretation. Demonstrates a commitment to professional development through participation of continuing education units.

Admission Requirements

To be considered for admission to the Diagnostic Medical Sonography Associate Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below. Applicants who complete DMS admission requirements at Mercy College will be awarded additional points in the admission process. Completing Program admission requirements at Mercy College does not guarantee acceptance into the DMS program.

All applicants must achieve a "C" or higher in the following college level courses:

- BIO 180 Human Anatomy (with lab)
- ENG 101 English Composition I
- MAT 120 College Algebra
- MED 101 Medical Terminology
- PHY 101 Physics (with lab)

Applicants may interview with one course requirement in-progress, admission to the Program is contingent upon successful completion of that course with a "C" or better.

All admission requirements listed above must be completed including documentation of the eight-hour observation and the interview with the Selection Committee by February 25. Admission into this program is on a competitive basis. Meeting the minimum criteria does not guarantee admission into this program. Admission into Mercy College
also does not guarantee admission into this program. 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 program must re-apply for the following year. Students may find it helpful to complete liberal arts and sciences courses at Mercy College prior to program admission.

Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

Program Application Deadlines

Applications for summer DMS program admission consideration must be received by the Admissions Department by November 15 for consideration. Application to the College may be completed earlier, but no later than November 15. Once the observation has been completed, the student will be contacted for a program interview. Admission to the DMS Program will be announced after February 15.

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<thead>
<tr>
<th></th>
<th>Program Application Deadline</th>
<th>Transcript Deadline</th>
<th>Interview Deadline</th>
</tr>
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<tbody>
<tr>
<td>Summer Semester</td>
<td>January 5</td>
<td>January 15</td>
<td>February 25</td>
</tr>
</tbody>
</table>

Articulation of Transfer Credit to Diagnostic Medical Sonography

In accord with College policy, the ASDMS Degree program accepts liberal 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:

1. Similarity of course content.
2. Transfer credits applied must have a grade of “C” or higher (not “C-”).

Clinical Standards

The following clinical standards are required of Mercy College DMS students. These abilities are based on the job requirements for sonographers at Mercy Medical Center — Des Moines, the site of most clinical experiences in the Diagnostic Medical Sonography program. Applicants must review the following clinical standards to determine their ability and compatibility with physical requirements of sonographers.

Physical Activity Requirements

Constant
- Talking and hearing – while exchanging information, both in person and by phone.
- Lifting, kneeling, bending, standing, pushing, pulling – while delivering direct patient care or utilizing equipment.

Frequent
- Sitting – while preparing educational activities, working on computer, etc.

Physical Demand Requirements
- Heavy work - 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
- Preparing and reading written documentation, use of computer.
- Peripheral vision.

Intellectual/Emotional Requirements

Students must be able to:
• Maintain a high standard of courtesy and cooperation in dealing with staff, patients and visitors, and perform job functions satisfactorily despite the stress of a hospital environment.
• Perform a variety of duties, often changing from one task to another without the 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 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 sensory or judgmental criteria; i.e., patient assessment and equipment performance.

Tools/Equipment
• Standard ultrasound equipment including, but not limited to, all types of computers, video systems, power equipment. Also 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 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 all its specifications for preventing contact with the above materials.
• Students are subject to electrical, radiant energy, and processor chemistry hazards.

Graduation Requirements ASDMS Degree

Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).

1. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
2. Complete the College residency requirement of 15 credit hours at the associate level.
3. Successfully complete all skill challenge exams.
4. Complete the Communication Competency Requirement.
5. Complete the Service Learning Project.
6. Successfully complete all clinical competencies.
7. Pass the Comprehensive Final Clinical Examination.
8. Pass the Mock Registry Examination requirements.

Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.
ASDMS Curriculum Guide – General Concentration

All students must complete the General Education Core requirements. Requirements can be following the Academic Policies and Procedures section of the Catalog.

Some courses listed below may fulfill general education requirements.

**Program Required Liberal Arts and Science Courses**

* BIO 180  Human Anatomy w/ lab  (4 cr)
* ENG 101  English Composition I  (3 cr)
* MAT 120  College Algebra  (3 cr)
* MED 101  Medical Terminology  (1 cr)
* PHY 101  Physics I w/ lab  (4 cr)
BIO 185  Human Physiology w/ lab  (4 cr)
PSY 101  General Psychology  (3 cr)
SPE 105  Small Group Communication  (1 cr)
BIO 302  Pathophysiology  (3 cr)
PHI 320  Bioethics  (3 cr)

Asterisk (*) indicates the course is a prerequisite for admission to the program.

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

**Major Program Requirements**

DMS 101  Foundations of Ultrasound  (3 cr)
DMS 103  Ultrasound Physics I  (2 cr)
DMS 111  Lab I  (1 cr)
DMS 112  Clinical I  (1 cr)
DMS 116  Applied I  (4 cr)
DMS 118  Applied II  (3 cr)
DMS 125  Ultrasound Physics II  (2 cr)
DMS 126  Lab II  (2 cr)
DMS 127  Clinical II  (2 cr)
DMS 138  Lab III  (1 cr)
DMS 137  Clinical III  (2 cr)
DMS 216  Applied II  (4 cr)
DMS 207  Lab IV  (2 cr)
DMS 211  Clinical IV  (3 cr)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
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<tr>
<td>DMS 231</td>
<td>Clinical V</td>
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<tr>
<td>DMS 234</td>
<td>Seminar</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>DMS 299</td>
<td>Special Topics</td>
<td>(1 cr)</td>
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</table>

**Recommended Courses Sequence**

**Semester I**

<table>
<thead>
<tr>
<th>Course Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy w/ lab</td>
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<tr>
<td>MAT 120</td>
<td>College Algebra</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>MED 101</td>
<td>Medical Terminology</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>PHY 101</td>
<td>Physics I w/ lab</td>
<td>(4 cr)</td>
</tr>
</tbody>
</table>

Total Credits: 15

**Semester II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 185</td>
<td>Human Physiology w/ lab</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>DMS 101</td>
<td>Foundations of Ultrasound</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>DMS 103</td>
<td>Ultrasound Physics I</td>
<td>(2 cr)</td>
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<tr>
<td>DMS 111</td>
<td>Lab I</td>
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<tr>
<td>DMS 112</td>
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<tr>
<td>DMS 116</td>
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Total Credits: 15

**Semester III**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
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<tr>
<td>DMS 126</td>
<td>Lab II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>DMS 127</td>
<td>Clinical II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>DMS 125</td>
<td>Ultrasound Physics II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>(1 cr)</td>
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</table>

Total Credits: 13

**Semester IV**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 302</td>
<td>Pathophysiology</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>DMS 138</td>
<td>Lab III</td>
<td>(1 cr)</td>
</tr>
</tbody>
</table>
DMS 137  Clinical III  (2 cr)
DMS 216  Applied III  (4 cr)
SLP 999  Service Learning Project  (0 cr)
Total Credits: 13

Semester V
DMS 207  Lab IV  (2 cr)
DMS 211  Clinical IV  (3 cr)
DMS 226  Applied IV  (3 cr)
         Humanities Elective  (3 cr)
SVL 285  Servant Leadership  (3 cr)
Total Credits: 14

Semester VI
DMS 231  Clinical V  (3 cr)
DMS 234  Seminar  (2 cr)
         Core Elective  (3 cr)
PHI 320  Bioethics  (3 cr)
DMS 299  Special Topics  (1 cr)
Total Credits: 12

Total Program Credits: 82
ASDMS Curriculum Guide – 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.

### Program Required Liberal Arts and Science Courses

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<td>*MAT 120</td>
<td>College Algebra</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>*MED 101</td>
<td>Medical Terminology</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>*PHY 101</td>
<td>Physics I w/ lab</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>BIO 185</td>
<td>Human Physiology w/ lab</td>
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</tr>
<tr>
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<td>Pathophysiology</td>
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</tr>
<tr>
<td>PHI 320</td>
<td>Bioethics</td>
<td>(3 cr)</td>
</tr>
</tbody>
</table>

Asterisk (*) indicates the course is a prerequisite for admission to the program.
Check course descriptions in the back of the catalog for appropriate prerequisite and co-requisite course associations.

### Major Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>DMS 101</td>
<td>Foundations of Ultrasound</td>
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</tr>
<tr>
<td>DMS 103</td>
<td>Ultrasound Physics I</td>
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</tr>
<tr>
<td>DMS 107</td>
<td>Lab I</td>
<td>(1 cr)</td>
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<tr>
<td>DMS 108</td>
<td>Clinical I</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>DMS 115</td>
<td>Applied I</td>
<td>(4 cr)</td>
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<td>DMS 117</td>
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<tr>
<td>DMS 125</td>
<td>Ultrasound Physics II</td>
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<tr>
<td>DMS 134</td>
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<td>DMS 233</td>
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</tr>
<tr>
<td>DMS 299</td>
<td>Special Topics</td>
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</table>

**Recommended Courses Sequence**

**Semester I**

<table>
<thead>
<tr>
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<td>(1 cr)</td>
</tr>
<tr>
<td>PHY 101</td>
<td>Physics I w/ lab</td>
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</tbody>
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Total Credits: 15

**Semester II**

<table>
<thead>
<tr>
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<tr>
<td>DMS 115</td>
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</table>

Total Credits: 15

**Semester III**

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<th>Course Code</th>
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<tr>
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<td>DMS 122</td>
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<tr>
<td>DMS 123</td>
<td>Clinical II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>DMS 125</td>
<td>Ultrasound Physics II</td>
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Total Credits: 13

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<td>(3 cr)</td>
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<tr>
<td>DMS 133</td>
<td>Clinical III</td>
<td>(2 cr)</td>
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</table>

Diagnostic Medical Sonography 58 mchs.edu
DMS 215  Applied III  (4 cr)
SLP 999  Service Learning Project  (0 cr)
Total Credits: 13

**Semester V**

DMS 204  Lab IV  (2 cr)
DMS 209  Clinical IV  (3 cr)
DMS 225  Applied IV  (3 cr)
Humanities  (3 cr)
SVL 285  Servant Leadership  (3 cr)
Total Credits: 14

**Semester VI**

DMS 230  Clinical V  (3 cr)
DMS 233  Seminar  (2 cr)
Humanities  (3 cr)
PHI 320  Bioethics  (3 cr)
DMS 299  Special Topics  (1 cr)
Total Credits: 12

**Total Program Credits: 82**
Emergency Medical Services Programs

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 College, the philosophy of the School of Allied Health, 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 Program provides students with the academic and clinical experiences needed to become caring, ethical, and competent health care 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 Degree in EMS, Mercy College 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 College EMS Program 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 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 materials/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 with 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.

Tool/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 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 has 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 of 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 (EM 109)

Purpose
The Emergency Medical Technician (EMT) Certificate Program is offered to provide an entry level course to students who may be interested in emergency health 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 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 a Field Internship as a member of an EMS crew responding to 911 calls. This quality educational program is timely,
convenient, and economical. Classes are taught by leading professionals in the field. EMT is the “gateway” course for all other levels of EMS Certification.

**Objectives**

Upon completion of the Emergency Medical Technician Program, 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 health care 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.

**Course Completion Requirements**

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

1. Successfully completion of all didactic, laboratory coursework.
2. Successfully completion of all clinical/field coursework.

**EMT Program Admission Requirements**

1. Complete and submit the online “Application for College Admission” at mchs.edu/apply or download and mail your application to the Admissions Department. Upon request, the Admissions Department will mail you an application.
2. Complete an EMT registration packet:
   a. Initiate a criminal background and a child and adult abuse check with CertifiedBackground.com along with the required payment to the vendor. The student must authorize CertifiedBackground.com to provide the results of these checks prior to final admission to the short-term certificate. Initiate this request 30 days prior to signing up for a registration session.
   b. Initiate the creation of an Electronic Health Record (EHR) with CertifiedBackground.com in order to complete a Clinical Standards form, and Immunization form at least ten (10) business days prior to signing up for a registration session. It is advised to submit the Immunization form to your primary health care provider as soon as possible in order to ensure its completion in advance of the College deadline. The Immunization form will need to verify compliance with the following:
      i. Two-step TB skin testing done within the past year; then a TB Skin test yearly after admission. If a positive PPD or history, a negative chest x-ray report.
      ii. Begin the Hepatitis B series or a positive Hepatitis B Surface antibody titer, or a letter from student’s physician stating need for exemption.
      iii. Measles, mumps, rubella (MMR vaccine) two doses or titers of all three diseases showing full immunity.
      iv. Chicken Pox (Varicella) – proof of disease by physician documentation or a positive titer or two doses of Varicella vaccine.
      v. The College may, at its discretion, also require proof of seasonal flu vaccination prior to participation in courses that include a clinical rotation.
3. If English is not your native language and you did not graduate from a U.S. high school you will need to provide either the results from an English as a Foreign Language (TOEFL) test with a score of 530 or higher and taken within the last two years (71 or higher on an Internet-based test or 197 or higher on a Computer-based test) or provide the results of a COMPASS ESL Reading test that shows the achievement of a score of 92 or higher and taken within the last two years or take the COMPASS ESL Reading test and achieve a score of 92 or higher. Prospective students taking the COMPASS ESL Reading test at Mercy College are allowed two attempts to achieve a score of 92 or higher. Prospective students who achieve a COMPASS ESL Reading test score of 91 or lower after two attempts will have the option to enroll as a guest student for RDG 095 only and will not be eligible for college admission for at least one academic semester. Students who successfully pass RDG 095 as a guest student with a C (not C-) or higher will have met the requirement. Students who opt not to enroll in RDG 095 as a guest student will need to provide documentation that outlines their additional efforts to improve their English abilities. These students will be required to take the COMPASS ESL Reading test and achieve a score of 92 or higher in two attempts.

4. Show proof of completion and current certification in American Heart Association Healthcare Provider CPR.

Post-Admission Procedure

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 via bureau of EMS Web site at http://www.idph.state.ia.us/ems. Assistance is provided during orientation/registration.

Paramedic Certificate Program

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 9-12 months of didactic study in either a day or evening program format. Some clinical and field internships may be completed after the didactic course work 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 department, and EMS agencies.

Objectives

Upon completion of the Paramedic Certificate program 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 health care 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.

Graduation Requirements Paramedic Certificate

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

1. Successfully complete all professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours.
4. Successfully complete all skills proficiency exams; including the Medical Director Exit Interview.

General Program Policy

Failed Course Policy
Paramedic Certificate students may repeat one of the following courses in the event they do not pass the course with a “C” or better in their first attempt. One of the following courses may be repeated once if failed the first time: EMS110, EMS111, EMS130, EMS131, EMS160, EMS161, and EMS162. (See Readmission Policy in the Admissions section)

Pre-Academic Program Admission Procedure
Refer to the Pre-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog for all Emergency Medical Services programs.

Admission Requirements for the Paramedic Certificate
To be considered for admission to the Paramedic Certificate Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Provide evidence of an active Iowa EMT certification.
2. Demonstrate the stated level of achievement in one of the following areas:
   a. Earned a high school or college cumulative GPA of 2.30 or higher on a 4.0 scale; or
   b. Earned a GED score of 450 or higher; or
   c. Earned an ACT composite score of 18 or higher.
3. Once the application and transcripts are received and it is determined the applicant meets the admission/academic requirements. The Mercy College EMT comprehensive written and skills exams will be scheduled. The EMS Program will provide applicants testing dates and administer the written and skills proficiency testing.
   a. Applicants must achieve a score of 75% or higher on a Mercy College comprehensive written exam designed to test knowledge of EMT material.
   b. Applicants must successfully complete a Mercy College EMT skills competency exams following completion of the comprehensive exam.
   c. These exams need to be successfully completed the semester immediately prior to enrolling in the Paramedic Certificate program. Students enrolled in the Mercy College EMT course will have the opportunity to complete these exams in class.
5. An interview will be scheduled once an applicant successfully completes the Mercy College EMT comprehensive written and skills exam. All applicants must participate in an interview. The interview will provide information and answer any questions the applicant may have about the Program. The applicant must achieve an interview score of 80% or higher with the Selection Committee in order to be offered a position in the next Paramedic Certificate program.
Paramedic Certificate Curriculum Guide

Major Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 110</td>
<td>Foundations of Paramedic Practice I</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>EMS 111</td>
<td>Foundations of Paramedic Practice II</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 112</td>
<td>EMS Skills Lab I</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 113</td>
<td>Clinical I</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Field Practicum</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>EMS 130</td>
<td>Management of Medical Emergencies</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>EMS 131</td>
<td>Management of Traumatic Emergencies</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 132</td>
<td>EMS Skills Lab II</td>
<td>(1 cr)</td>
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<td>EMS 133</td>
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<tr>
<td>EMS 134</td>
<td>Field Practicum II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 160</td>
<td>Care of Special Populations</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 161</td>
<td>EMS Operations</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 162</td>
<td>Transition to EMS Team Leader</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 163</td>
<td>Clinical III</td>
<td>(2 cr)</td>
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<tr>
<td>EMS 164</td>
<td>Field Practicum III</td>
<td>(2 cr)</td>
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</table>

Paramedic Certificate Program Total Credits: 36

*Servant Leadership Workshop embedded within EMS 110

Recommended Course Sequence

Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
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<td>EMS 112</td>
<td>EMS Skills Lab I</td>
<td>(2 cr)</td>
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<tr>
<td>EMS 113</td>
<td>Clinical I</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Field Practicum I</td>
<td>(1 cr)</td>
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Totals Credits: 12

Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>EMS 132</td>
<td>EMS Skills Lab II</td>
<td>(1 cr)</td>
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<tr>
<td>EMS 133</td>
<td>Clinical II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 134</td>
<td>Field Practicum II</td>
<td>(2 cr)</td>
</tr>
</tbody>
</table>

Total Credits: 12
Semester III
EMS 160 Care of Special Populations (3 cr)
EMS 16 EMS Operations (3 cr)
EMS 162 Transition to EMS Team Leader (2 cr)
EMS 163 Clinical III (2 cr)
EMS 164 Field Practicum III (2 cr)

Total Credits: 12
TOTAL CREDITS: 36

Accelerated Paramedic Certificate Curriculum Guide

Major Program Requirements
EMS 110 Foundations of Paramedic Practice I* (4 cr)
EMS 111 Foundations of Paramedic Practice II (3 cr)
EMS 130 Management of Medical Emergencies (4 cr)
EMS 131 Management of Traumatic Emergencies (3 cr)
EMS 112 EMS Skills Lab (2 cr)
EMS 132 EMS Skills Lab II (1 cr)
EMS 113 Clinical I (2 cr)
EMS 114 Field Practicum I (1 cr)
EMS 133 Clinical II (2 cr)
EMS 134 Field Practicum II (2 cr)
EMS 160 Care of Special Populations (3 cr)
EMS 161 EMS Operations (3 cr)
EMS 162 Transition to EMS Team Leader (2 cr)
EMS 163 Clinical III (2 cr)
EMS 164 Field Practicum III (2 cr)

Total Credits: 36

*Servant Leadership Workshop embedded within EMS 110

Recommended Course Sequence

Semester I
EMS 110 Foundations of Paramedic Practice I (4 cr)
EMS 111 Foundations of Paramedic Practice II (3 cr)
EMS 112 EMS Skills Lab I (2 cr)
EMS 113 Clinical I (2 cr)
EMS 114 Field Practicum I (1 cr)
EMS 130 Management of Medical Emergencies (4 cr)
EMS 131 Management of Traumatic Emergencies (3 cr)
EMS 132 EMS Skills Lab II (1 cr)
Total Credits: 20

Semester II
EMS 133 Clinical II (2 cr)
EMS 134 Field Practicum II (2 cr)
EMS 160 Care of Special Populations (3 cr)
EMS 161 EMS Operations (3 cr)
EMS 162 Transition to EMS Team Leader (2 cr)
EMS 163 Clinical III (2 cr)
EMS 164 Field Practicum III (2 cr)
Total Credits: 16

Associate of Science in Emergency Medical Services Completion Program

Purpose
The Associate of Science in Emergency Medical Services degree is offered for students who wish to earn a degree as a credential to indicate completion of a college based program in Emergency Medical Services. The degree indicates a student has completed an educational experience that includes liberal arts and science courses in addition to the professional program courses. Students completing an ASEMS degree may continue to complete a Bachelor of Science degree in Health Care Administration or a Bachelor of Science in Health Sciences degree at Mercy College. An Associate of Science in Emergency Medical Services (ASEMS) Degree may be earned concurrently or following completion of the Paramedic Certificate program by taking an additional 30 credit hours of liberal arts and science courses.

Objectives
Upon completion of the Emergency Medical Services Associate Degree, 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 health care 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 liberal 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.

Graduation Requirements ASEMS Degree

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

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete applicable Program Exit requirements for Paramedic Certificate.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.

General Program Policy

Failed Course Policy

Paramedic Certificate students may repeat one of the following courses in the event they do not pass the course with a "C" or better in their first attempt. One of the following courses may be repeated once if failed the first time: EMS110, EMS111, EMS130, EMS131, EMS160, EMS161, and EMS162. (See Readmission Policy in the Admissions section)

Admission Requirements for the Associate of Science in Emergency Medical Services Completion Program

To be considered for admission to the Emergency Medical Services Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Provide evidence of an active Iowa EMT certification.
2. Demonstrate the stated level of achievement in one of the following areas:
   a. Earned a high school or college cumulative GPA of 2.30 or higher on a 4.0 scale; or
   b. Earned a GED score of 450 or higher; or
   c. Earned an ACT composite score of 19 or higher.
3. If the above criteria are not met, students may be admitted if they meet one of the following:
   a. Earned an associate degree or higher from a regionally accredited college or university with a cumulative GPA of 2.30 or higher on a 4.0 scale; or
   b. Completed nine (9) college credit hours specific to the Mercy College EMS curriculum, achieved a grade of “C” or higher in each course, and earned a cumulative GPA of 2.30 or higher on a 4.0 scale; or
   c. Show evidence of current NREMT Paramedic certification
4. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Algebra I, Biology, and English.
5. Once the application and transcripts are received and it is determined the applicant meets the admission/academic requirements. The Mercy College EMT comprehensive written and skills exams will
be scheduled. The EMS Program will provide applicants testing dates and administer the written and skills proficiency testing.

a. Applicants must achieve a score of 75% or higher on a Mercy College comprehensive written exam designed to test knowledge of EMT material.

b. Applicants must successfully complete a Mercy College EMT skills competency exams following completion of the comprehensive exam.

c. These exams need to be successfully completed the semester immediately prior to enrolling in the Associate of Science in Emergency Medical Services program. Students enrolled in the Mercy College EMT course will have the opportunity to complete these exams in class.

6. An interview will be scheduled once an applicant successfully completes the Mercy College EMT comprehensive written and skills exam. All applicants must participate in an interview. The interview will provide information and answer any questions the applicant may have about the Program. The applicant must achieve an interview score of 80% or higher with the Selection Committee in order to be offered a position in the next Associate of Science in Emergency Medical Services program.

Post Academic Program Admission Procedure

Department of Public Health Requirement: EMS applicants must complete the EMS Student Registration within 14 days after the course start date. EMS Student Registration must be completed via bureau of EMS Web site at http://www.idph.state.ia.us/ems. Assistance is provided during orientation/registration.

Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.

ASEMS Curriculum Guide

Recommended Course Sequence

The Liberal 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 the professional program courses.

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

**Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with Lab)</td>
<td>4 cr</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>EMS 110</td>
<td>Foundations of Paramedic Practice I</td>
<td>4 cr</td>
</tr>
<tr>
<td>EMS 111</td>
<td>Foundations of Paramedic Practice II</td>
<td>3 cr</td>
</tr>
<tr>
<td>EMS 112</td>
<td>EMS Skills Lab I</td>
<td>2 cr</td>
</tr>
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</table>

**Total Credits:** 16

**Semester II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>EMS 113</td>
<td>Paramedic Clinical Internship I</td>
<td>2 cr</td>
</tr>
<tr>
<td>EMS 114</td>
<td>Paramedic Field Internship I</td>
<td>1 cr</td>
</tr>
<tr>
<td>BIOI 185</td>
<td>Health Sciences Physiology (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
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<tr>
<td>MAT 100 level or higher</td>
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**Total Credits:** 13
### Semester III

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<thead>
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</thead>
<tbody>
<tr>
<td>EMS 130</td>
<td>Management of Medical Emergencies</td>
<td>(4 cr)</td>
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<tr>
<td>EMS 131</td>
<td>Management of Traumatic Emergencies</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 132</td>
<td>EMS Skills Lab II</td>
<td>(1 cr)</td>
</tr>
<tr>
<td></td>
<td>Humanities elective 100 level or higher</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
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**Total Credits: 12**

### Semester IV

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<tbody>
<tr>
<td>EMS 133</td>
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<tr>
<td>EMS 134</td>
<td>Paramedic Field Internship II</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>(3 cr)</td>
</tr>
<tr>
<td></td>
<td>Humanities elective 100 level or higher</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>EMS 160</td>
<td>Care of Special Populations</td>
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**Total Credits: 13**

### Semester V

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>EMS 161</td>
<td>EMS Operations</td>
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<tr>
<td>EMS 162</td>
<td>Transition to EMS Team Leader</td>
<td>(2 cr)</td>
</tr>
<tr>
<td>EMS 163</td>
<td>Paramedic Clinical III</td>
<td>(2 cr)</td>
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<tr>
<td>EMS 164</td>
<td>Paramedic Field Internship III</td>
<td>(2 cr)</td>
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<tr>
<td>SVL 285</td>
<td>Servant Leadership</td>
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**Total Credits: 12**

**Program Required Liberal Arts and Science Courses**

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BIO 180</td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>(3 cr)</td>
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<tr>
<td>SPE 105</td>
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<tr>
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<tr>
<td></td>
<td>Humanities elective 100 level or higher</td>
<td>(3 cr)</td>
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<td>Core elective 100 level or higher</td>
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<tr>
<td>SVL 285</td>
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**Total Credits for General Education: 30 credits**
Major Program Requirements

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<td>Fundamentals of Paramedic Practice II</td>
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<td>EMS 112</td>
<td>EMS Skills Lab I</td>
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<td>EMS 113</td>
<td>Clinical Internship I</td>
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<td>EMS 114</td>
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<td>EMS 130</td>
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<td>EMS 134</td>
<td>Field Internship II</td>
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<tr>
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</table>

Total Credits for Professional Program Courses: 36 credits

Total Credit Hours for ASEMS Degree: 66 credits
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. Through a combination of didactic, lab, clinical internship, and field internship with a 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 or Iowa Paramedic Specialist (PS) or Iowa Paramedic (PM) level.

Objectives

Upon completion of the Critical Care Paramedic program 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 health care 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

Course Completion Requirements

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

1. Successfully completion of all didactic, laboratory coursework.
2. Successfully completion of all clinical/field coursework.

Critical Care Paramedic Program Admission Requirements

1. Complete and submit the online “Application for College Admission” at mchs.edu/apply or download and mail your application to the Admissions Department. Upon request, the Admissions Department will mail you an application.
2. Complete an CCP registration packet:
   c. Initiate a criminal background and a child and adult abuse check with CertifiedBackground.com along with the required payment to the vendor. The student must authorize CertifiedBackground.com to provide the results of these checks prior to final admission to the short-term certificate. Initiate this request 30 days prior to signing up for a registration session.
   d. Initiate the creation of an Electronic Health Record (EHR) with CertifiedBackground.com in order to complete a Clinical Standards form, and Immunization form at least ten (10) business days prior to signing up for a registration session. It is advised to submit the Immunization form to your primary health care provider as soon as possible in order to ensure its completion in advance of the College deadline. The Immunization form will need to verify compliance with the following:
i Two-step TB skin testing done within the past year; then a TB Skin test yearly after admission. If a positive PPD or history, a negative chest x-ray report.

ii Begin the Hepatitis B series or a positive Hepatitis B Surface antibody titer, or a letter from student’s physician stating need for exemption.

iii Measles, mumps, rubella (MMR vaccine) two doses or titers of all three diseases showing full immunity.

iv Chicken Pox (Varicella) – proof of disease by physician documentation or a positive titer or two doses of Varicella vaccine.

v The College may, at its discretion, also require proof of seasonal flu vaccination prior to participation in courses that include a clinical rotation.

3. If English is not your native language and you did not graduate from a U.S. high school you will need to provide either the results from an English as a Foreign Language (TOEFL) test with a score of 530 or higher and taken within the last two years (71 or higher on an Internet-based test or 197 or higher on a Computer-based test) or provide the results of a COMPASS ESL Reading test that shows the achievement of a score of 92 or higher and taken within the last two years or take the COMPASS ESL Reading test and achieve a score of 92 or higher. Prospective students taking the COMPASS ESL Reading test at Mercy College are allowed two attempts to achieve a score of 92 or higher. Prospective students who achieve a COMPASS ESL Reading test score of 91 or lower after two attempts will have the option to enroll as a guest student for RDG 095 only and will not be eligible for college admission for at least one academic semester. Students who successfully pass RDG 095 as a guest student with a C (not C-) or higher will have met the requirement. Students who opt not to enroll in RDG 095 as a guest student will need to provide documentation that outlines their additional efforts to improve their English abilities. These students will be required to take the COMPASS ESL Reading test and achieve a score of 92 or higher in two attempts.

4. Show proof of completion and current certification in American Heart Association Healthcare Provider CPR.
Medical Assisting Programs

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 College, the philosophy of the School of Allied Health, and in compliance with the Commission on Accreditation of Allied Health Education Programs (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 College provides students with the academic and clinical experiences needed to become caring, ethical, and competent health care providers. Medical assistants are multi-skilled health care 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.

Medical Assisting Program Learning Goals:
- To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) domains utilizing the resource of the 2008 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.

Learning Objectives
Upon completion of the Medical Assisting Certificate program, 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 health care 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 Associate Degree, graduates will demonstrate the objectives of the certificate program and will:

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

Medical Assisting Certificate Program
The Medical Assisting (MA) Certificate curriculum encompasses three semesters. The program includes classroom instruction, competency demonstration in skills lab, and clinical experience in an ambulatory care setting.

Associate of Science in Medical Assisting Program
An Associate of Science in Medical Assisting (ASMA) Degree may be earned by taking the 68 credit hours specified in the ASMA curriculum.
Admission Requirements for the Certificate Program

To be considered for admission to the Medical Assisting Certificate Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Demonstrate the stated level of achievement in one of the following areas:
   a. Earn a high school or college (minimum of 9 credit hours) cumulative GPA of 2.25 or higher on a 4.0 scale; or
   b. Earn a GED score of 450 or higher; or
   c. Earn an ACT composite score of 18 or higher; or
   d. Earned an associate degree or higher from a regionally accredited college or university; or
   e. Completed nine (9) college credit hours specific to the Mercy College curriculum, achieved a grade of “C” (not “C-”) or higher in each course, and earned a cumulative GPA of 2.25 or higher on a 4.0 scale.

2. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Natural Science, English, and Math.

3. Interview with the Medical Assisting program chair.

Admission Requirements for the Associate of Science Program

To be considered for admission to the Associate of Science Degree Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Demonstrate the stated level of achievement in one of the following areas:
   a. Earn a high school or college (minimum of 9 credit hours) cumulative GPA of 2.25 or higher on a 4.0 scale; or
   b. Earn a GED score of 450 or higher; or
   c. Earn an ACT composite score of 18 or higher; or
   d. Earned an associate degree or higher from a regionally accredited college or university; or
   e. Completed nine (9) college credit hours specific to the Mercy College curriculum, achieved a grade of “C” (not “C-”) or higher in each course, and earned a cumulative GPA of 2.25 or higher on a 4.0 scale.

2. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Natural Science, English, and Math.

3. Interview with the Medical Assisting program chair.

Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog for all Medical Assisting programs.

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 College. 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.
4. Availability of space in the appropriate medical assisting 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 College 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 the medical assisting program. 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 discriminations 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 the 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
• X-Ray Equipment
• Computer
• Photocopier
• Diagnostic/Therapeutic Equipment

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.

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

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours.
4. 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:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete all skill competency exams.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.

Policies
Radiation Safety
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 College, in collaboration with Mercy Medical Center, strives to assure student exposure during clinical rotations stays under 500 mrem/quarter. The action levels established in Mercy Medical Center’s ALARA program are 200 mrem/quarter and 400 mrem/quarter which are 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, Nuclear
Medicine Technology, Medical Assisting, 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 College at no cost to the student.

To assure student safety:

- The Radiation Safety Officer (RSO) reviews radiation monitoring badge reports.
- Radiation monitoring badge reports are discussed at the quarterly Radiation Safety Committee (RSC) meeting. The Nuclear Medicine Technology, Medical Assisting, and Radiologic Technology Program Chairs are members of this committee.
- If a student’s exposure exceeds 400 mrem in one calendar quarter, he/she receives a letter, is counseled, receives a second monitoring badge, and exposure is recorded by the RSO.
- Monthly radiation monitoring badge reports are posted for student review and maintained in the Program Chair or clinical coordinator’s office.
- Coursework covers information on radiation monitoring devices and radiation protection in greater detail.

Pregnancy

A student who becomes pregnant during this program may advise the Program Chair. Students reserve the right to undeclare a pregnancy. If a student declares a pregnancy in writing she will be counseled about revisions in her clinical schedule that may be needed to attain academic and program clinical competencies. The student’s time in the program may need to be lengthened to ensure all competencies are attained prior to graduation from the program. The LRT 101 course provides students with information on protecting oneself from exposure to ionizing radiation and includes an in-depth explanation of the Pregnancy Policy. This information is provided prior to clinical assignments.
Medical Assisting Certificate Curriculum Guide

ASMA Degree Program Total Credits 68

Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.

Medical Assisting Certificate

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.

Program Required Liberal Arts and Sciences Courses

SPE 105  Small Group Communication  (1 cr)
PSY 101  General Psychology  (3 cr)

*Servant Leadership Workshop embedded within MA courses

Major Program Required Courses

LRT 101  Diagnostic Procedures I  (2 cr)
LRT 102  Diagnostic Procedures II  (2 cr)
LRT 110  Imaging  (2 cr)
LRT 120  Practicum  (1 cr)
MA 101  Medical Assisting Administrative Procedures I  (4 cr)
MA 102  Medical Assisting Clinical Procedures I  (4 cr)
MA 106  Anatomy and Physiology  (4 cr)
MA 108  Diseases of the Human Body  (3 cr)
MA 121  Medical Assisting Administrative Procedures II  (4 cr)
MA 122  Medical Assisting Clinical Procedures II  (5 cr)
MA 201  Medical Assisting Professional Components  (2 cr)
MA 202  Medical Assisting Externship  (6 cr)

Total Program Credits: 39

Recommended Course Sequence

Please refer to General Education Core section of the catalog for general education core requirements.

Semester I

MA 101  Medical Assisting Administrative Procedures I  (4 cr)
MA 102  Medical Assisting Clinical Procedures I  (4 cr)
MA 106  Anatomy and Physiology  (4 cr)
LRT 110  Imaging  (2 cr)

Total Credits: 14
Semester II
MA 108 Diseases of the Human Body (3 cr)
MA 121 Medical Assisting Administrative Procedures II (4 cr)
MA 122 Medical Assisting Clinical Procedures II (5 cr)
LRT 102 Diagnostic Procedures I (2 cr)
SPE 105 Small Group Communication (1 cr)
Total Credits: 15

Semester III
MA 201 Medical Assisting Professional Components (2 cr)
MA 202 Medical Assisting Externship (6 cr)
LRT 120 Practicum (1 cr)
LRT 102 Diagnostic Procedures II (2 cr)
PSY 101 General Psychology (3 cr)
Total Credits: 14

ASMA Semester IV and Semester V
General Education Completion Credit Hours: 25 credits past MA Certificate
 Associate of Science in Medical Assisting Completion Curriculum Plan
MAT 102 Math (3 cr)
100 level or higher Natural Science (4cr)
ENG 101 English Composition 1 (3 cr)
ENG 102 English Composition 2 (3 cr)
100 level or higher Humanities elective (3cr)
100 level or higher Core Elective (3er)
SVL 285 Servant Leadership (3 cr)
Elective Natural Science or Social Science (3 cr)
TOTAL ASMA Program Credits: 68
Nuclear Medicine Technology Certificate

Purpose
The Nuclear Medicine Technology (NMT) Program is dedicated to educating students in the art and science of medical imaging through an integrated program of studies and professional education. Guided by the mission of Mercy College, the philosophy of the School of Allied Health and in compliance with the Joint Review Committee on Educational Programs in Nuclear Medicine 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 and therapeutic procedures, protect self and others from unnecessary radiation exposure, and pursue life-long learning.

Goals
- Educate students in the art and science of Nuclear Medicine Technology.
- Provide students with the knowledge, skills, and attitudes needed to be technically skilled caring individuals who are critical thinkers and problem solvers.
- Provide students with the knowledge, skills, and attitudes necessary to provide quality patient care while protecting self, patient and others from unnecessary radiation.
- Instill in students the desire to continue their education and pursue life-long learning.
- Provide educational opportunities that facilitate personal development and community involvement.

Objectives
Upon completion of the Certificate in Nuclear Medicine Technology, the graduate will be able to:
- Perform nuclear medicine procedures accurately and safely
- Modify nuclear medicine procedures to optimize patient outcomes
- Communicate professionally with patients, families, healthcare practitioners, and others
- Apply radiation protection techniques to maintain radiation exposure “As Low As Reasonably Achievable (ALARA)” for the patient, self, and others
- Demonstrate ethical and legal standards for the profession of nuclear medicine technology
- Practice professional development through participation in self-assessment and lifelong learning activities

Admission Requirements
To be considered for admission to the Nuclear Medicine Technology Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program.

1. Have earned a grade of “C” (not “C-“) or higher in each of the following college-level courses:
   - Anatomy with lab
   - College Algebra (or higher level math)
   - English
   - General Chemistry with lab
   - Physics
   - Physiology with lab

2. Have earned a grade of “C” (not “C-“) or higher in each of the following college-level courses:
   - Humanities course
   - Medical Terminology
   - Oral Communication
Social Science course
Applicants who have not met this requirement may take these courses concurrently with the program courses. Satisfactory completion of these courses will be a graduation requirement.

3. Satisfy one of the following three conditions:
   a. Be certified/licensed in a related health care field (a minimum of two years education in an accredited educational program is required) such as: radiologic technology, medical technology, or nursing, with a cumulative GPA of 2.7 or higher on a 4.0 scale. Hold current registration, in good standing, with the appropriate certifying board(s), if applicable.
   b. Hold a baccalaureate degree that includes all program prerequisite courses listed above with a cumulative GPA of 2.7 or higher on a 4.0 scale.
   c. Be enrolled in an affiliated baccalaureate program with a cumulative GPA of 2.7 or higher on a 4.0 scale. All coursework, other than the nuclear medicine technology courses, required by the academic institution toward a Bachelor’s Degree, must be completed by the student prior to beginning the nuclear medicine technology program. Affiliated baccalaureate programs are at the following institutions:
      - Drake University*
      - Grandview University*
      - Mercy College of Health Sciences
*Affiliation currently being finalized.

4. Complete eight hours of observation in a nuclear medicine department.
5. Submit two letters of recommendation for admission to the program.
6. Complete a successful interview with the Program Selection Committee. This interview is scheduled when all other admission requirements have been met.

Admission into this program is on a competitive basis. Meeting the minimum criteria does not guarantee admission into this program. Admission into Mercy College also does not guarantee admission into this program. 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 program may re-apply for the following year.

Post-Academic Program Admission Procedure
Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

Clinical Standards
The following clinical standards are required of Mercy College Nuclear Medicine Technology students. These abilities are based on the job requirements for Nuclear Medicine Technology Technologists at Mercy Medical Center — Des Moines where most clinical experiences will occur. Applicants must review the following clinical standards to determine their ability and compatibility with the physical requirements of Nuclear Medicine 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 performing activities, working on computer, etc.

Physical Demand Requirements
Heavy work - 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
- Preparing and reading written documentation, use of computer.
- Peripheral vision.

Intellectual/Emotional Requirements
Students must be able to:
- Maintain a high standard of courtesy and cooperation in dealing with staff, patients and visitors, and perform clinical assignments despite the stress of a hospital environment.
- Perform a variety of duties, often changing from one task to another without the 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 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 sensory or judgmental criteria; i.e., patient assessment.
- Make generalizations, evaluations or decisions based on measurable or verifiable criteria; i.e., patient assessment and equipment performance.

Tools/Equipment
Standard nuclear imaging equipment including, but not limited to, all types of computers, video systems and power equipment. Also 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 in the 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.
- Students are subject to electrical, radiant energy and processor chemistry hazards.

Graduation Requirements NMT Certificate
Student must meet the following requirements to receive a Nuclear Medicine Technology Certificate:
1. Successfully complete all professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours.

Upon satisfactory completion of all graduation requirements for the NMT program the student will be awarded the Certificate of Nuclear Medicine Technology.

The graduate may apply to write the National Certification Examination given by the Nuclear Medicine Technology Certification Board and/or the National Registry Examination given by the American Registry of Radiologic Technologists (Nuclear Medicine). In the state of Iowa, a Permit to Practice is required in order to perform nuclear medicine procedures. Information concerning these examinations will be provided prior to graduation.

Policies
Pregnancy
A student who becomes pregnant during this program may advise the Program Chair. Students reserve the right to undeclare a pregnancy. If a student declares a pregnancy in writing she will be counseled about revisions in her clinical schedule that may be needed to attain academic and program clinical competencies. The student’s time in the program may need to be lengthened to ensure all competencies are attained prior to graduation from the program. The NMT 401 course provides students with information on protecting oneself from exposure to ionizing radiation and includes an in-depth explanation of the Pregnancy Policy. This information is provided prior to clinical assignments.
Radiation Safety

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 College, in collaboration with Mercy Medical Center, strives to assure student exposure during clinical rotations stays under 500 mrem/year. The action levels established in Mercy Medical Center’s ALARA program are 200 mrem/quarter and 400 mrem/quarter which are 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, Nuclear Medicine Technology, Medical Assistant, 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 College at no cost to the student.

To assure student safety:

- The Radiation Safety Officer (RSO) reviews radiation monitoring badge reports.
- Radiation monitoring badge reports are discussed at the quarterly Radiation Safety Committee (RSC) meeting. The Nuclear Medicine, Medical Assisting, and Radiologic Technology Program Chairs are members of this committee.
- If a student’s exposure exceeds 400 mrem in one calendar quarter, he/she receives a letter, is counseled, receives a second monitoring badge, and exposure is recorded by the RSO.
- Monthly radiation monitoring badge reports are posted for student review and maintained in the Program Chair or Clinical Coordinator’s office.
- Coursework covers information on radiation monitoring devices and radiation protection in greater detail.
NMT Curriculum Guide

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.

Program Required Liberal Arts and Science Courses

SVL Servant Leadership Workshop (0 cr)

*Anatomy with lab
*College Level Algebra or higher level Math
*General Chemistry with lab *English
*Physics
*Physiology with lab
**Humanities course
**Social Science course
**Oral Communication
**Medical Terminology

Asterisk (*) indicates the course is a prerequisite for admission to the program.

Double asterisk (**) indicates the course can be a co-requisite and taken with program courses.

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

Major Program Requirements

NMT 401 Nuclear Medicine Foundations (3 cr)
NMT 410 Nuclear Medicine Physics (2 cr)
NMT 415 Nuclear Medicine Imaging I (3 cr)
NMT 420 Clinical I (5 cr)
NMT 441 Nuclear Medicine Principles (2 cr)
NMT 445 Nuclear Medicine Imaging II (2 cr)
NMT 450 Clinical II (11 cr)
NMT 470 Advanced Clinical (12 cr)

Recommended Courses Sequence

Semester I (Fall)

NMT 401 Nuclear Medicine Foundations (3 cr)
NMT 410 Nuclear Medicine Physics (2 cr)
NMT 415 Nuclear Medicine Imaging I (3 cr)
NMT 420 Clinical I (5 cr)

Total Credits: 13
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Total Credits: 15

**Semester III (Summer)**

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<td>Servant Leadership Workshop</td>
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Total Credits: 12

**Total Credits: 40**
Associate of Science in 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.

Objectives
Upon completion of the Physical Therapist Assistant Associate Degree, 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, health care 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 or group.
6. Collaborate with other members of the health care 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.
8. Demonstrate a commitment to professional development through participation in self-assessment and lifelong learning activities.

Admission Requirements
To be considered for admission to the Physical Therapist Assistant Associate Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. First-time College Students:
   a. Earn a cumulative GPA of 2.7, and
   b. Minimum ACT composite score of 20 or higher.
2. Transfer Students:
   a. Earn a cumulative GPA of 2.7 or higher on a 4.0 scale at the last college attended (minimum of nine (9) credits), and
   b. Complete nine (9) college credit hours specific to the Mercy College ASPTA Curriculum, achieve a grade of “C” or higher (not “C-”) in each course.
3. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Algebra I, Biology, English, and Physics.
4. Provide documentation of a 40-hour observation in a physical therapy department(s) with a minimum of at least two levels of care (e.g., acute hospital, skilled nursing facility, school setting, and out-patient physical therapy clinic). Equivalent work experience in rehabilitation may be accepted to fulfill observation experiences required. Observation forms will be provided by the Program Chair. Documentation of observation must be received by the Program Chair prior to the applicant being scheduled for an interview.
5. Provide two letters of recommendation: one letter from an academic resource and one letter from a clinical resource (PT or PTA). Forms are provided. Letters must be received prior to the applicant being scheduled for an interview.
6. Achieve an interview score of 80% or higher with the Selection Committee. This interview is scheduled after all other documents have been received.
Post-Academic Program Admission Procedure

Refer to the Post Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

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 College. 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 may be administered by the Program Chair to verify knowledge and clinical skills prior to accepting transfer credit.
4. Availability of space in the appropriate physical therapist assistant 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 College Physical Therapist Assistant students. These abilities are based on the job requirements for Physical Therapist Assistant at Mercy Medical Center—Des Moines 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.
- **Pushing**: Assisting or resisting a patient during exercise; moving patient in wheelchair. Forces of 20-100 pounds.
- **Pulling**: Same as pushing.
- **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 if 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, 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 health care 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/Pagers
- Isokinetic Equipment/Wheelchairs/Carts
- Personal Computer and Printer
- Topical Heat/Cold
- Computer
- 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, lift mechanisms, chemicals used in whirlpool 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.

Graduation Requirements ASPTA Degree
Student must meet the following requirements to receive an Associate of Science in Physical Therapist Assistant Degree:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-“).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete all skill challenge exams.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.
7. Successfully complete all clinical competencies.
The Physical Therapist Assistant Program at Mercy College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314; telephone: 703-706-3245; email: accreditation@apta.org; website: www.capteonline.org.
Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.

Physical Therapist Assistant Curriculum Guide

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.

Program Required Liberal Arts and Science Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIO 185</td>
<td>Human Physiology (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIO 302</td>
<td>Pathophysiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>MED 101</td>
<td>Medical Terminology</td>
<td>1 cr</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 202</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>1 cr</td>
</tr>
</tbody>
</table>

Asterisk (*) indicates the course is a prerequisite for admission to the program.

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

Major Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 101</td>
<td>Fundamentals of Physical Therapy (with lab)</td>
<td>3 cr</td>
</tr>
<tr>
<td>PTA 103</td>
<td>PTA Clinical I</td>
<td>1 cr</td>
</tr>
<tr>
<td>PTA 130</td>
<td>Kinesiology (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PTA 135</td>
<td>Essential Skills in Physical Therapy I (with lab)</td>
<td>2 cr</td>
</tr>
<tr>
<td>PTA 160</td>
<td>Physical Therapy Modalities (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PTA 162</td>
<td>Therapeutic Exercise (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PTA 163</td>
<td>PTA Clinical II</td>
<td>2 cr</td>
</tr>
<tr>
<td>PTA 165</td>
<td>Essential Skills in Physical Therapy II (with lab)</td>
<td>2 cr</td>
</tr>
<tr>
<td>PTA 201</td>
<td>Physical Therapy Interventions for Musculoskeletal &amp; Integumentary Conditions (with lab)</td>
<td>3 cr</td>
</tr>
<tr>
<td>PTA 202</td>
<td>Physical Therapy Interventions for Neuromuscular &amp; Cardiopulmonary Conditions (with lab)</td>
<td>3 cr</td>
</tr>
<tr>
<td>PTA 204</td>
<td>Professional Issues</td>
<td>2 cr</td>
</tr>
<tr>
<td>PTA 230</td>
<td>Issues in Clinical Practice</td>
<td>1 cr</td>
</tr>
<tr>
<td>PTA 232</td>
<td>PTA Clinical III</td>
<td>5.5 cr</td>
</tr>
<tr>
<td>PTA 234</td>
<td>PTA Clinical IV</td>
<td>5.5 cr</td>
</tr>
<tr>
<td>PTA 235</td>
<td>PTA Seminar</td>
<td>1 cr</td>
</tr>
</tbody>
</table>
Recommended Courses Sequence

Semester I (Fall)

BIO 180  Human Anatomy (with lab) (4 cr)
ENG 101  English Composition I (3 cr)
100-level or higher Mathematics (MATH) elective (3 cr)
MED 101  Medical Terminology (1 cr)
PTA 101  Fundamentals of Physical Therapy (with lab) (3 cr)
PTA 103  PTA Clinical I (1 cr)
SPE 105  Small Group Communication (1 cr)
Total Credits: 16

Semester II (Spring)

BIO 185  Human Physiology (with lab) (4 cr)
ENG 102  English Composition II (3 cr)
PSY 101  General Psychology (3 cr)
PTA 130  Kinesiology (with lab) (4 cr)
PTA 135  Essential Skills in Physical Therapy I (2 cr)
Total Credits: 16

Semester III (Summer)

BIO 302  Pathophysiology (3 cr)
PTA 160  Physical Therapy Modalities (with lab) (4 cr)
PTA 162  Therapeutic Exercise (with lab) (4 cr)
PTA 163  PTA Clinical II (2 cr)
PTA 165  Essential Skills in Physical Therapy II (2 cr)
Total Credits: 15

Semester IV (Fall)

100 level or higher Humanities elective (3 cr)
PSY 202  Developmental Psychology (3 cr)
PTA 201  Physical Therapy Interventions for Musculoskeletal and Integumentary Conditions (with lab) (3 cr)
PTA 202  Physical Therapy Interventions for Neuromuscular and Cardiopulmonary Conditions (with lab) (3 cr)
PTA 204  Professional Issues (2 cr)
SVL 285  Servant Leadership (3 cr)
Total Credits: 17
### Semester V (Spring)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA 230</td>
<td>Issues in Clinical Practice</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>PTA 232</td>
<td>PTA Clinical III</td>
<td>(5.5 cr)</td>
</tr>
<tr>
<td>PTA 234</td>
<td>PTA Clinical IV</td>
<td>(5.5 cr)</td>
</tr>
<tr>
<td>PTA 235</td>
<td>PTA Seminar</td>
<td>(1 cr)</td>
</tr>
</tbody>
</table>

Total Credits: 13

**Total Program Credits: 77**
Associate of Science in Polysomnographic [Sleep] Technology (Online)

Due to a review of the Polysomnography Technology program, applications for the 2014-2015 academic year will be deferred for the fall 2015.

Purpose

The Polysomnographic [Sleep] Technology Program (PSGT) is dedicated to educating students in the polysomnography profession to work in conjunction with physicians to provide comprehensive clinical evaluations that are required for the diagnosis of sleep disorders. By applying non-invasive monitoring equipment, the technologist simultaneously monitors EEG (electroencephalography), EOG (electrooculography), EMG (electromyography), ECG (electrocardiography), multiple breathing variables, and blood oxygen levels during sleep.

Interpretive knowledge is required to provide sufficient monitoring diligence to record parameters and the clinical events observed during sleep. Technologists provide supportive services related to the ongoing treatment of sleep related problems. The professional realm of this support includes guidance on the use of devices for the treatment of breathing problems during sleep and helping individuals develop sleeping habits that promote good sleep hygiene.

The program is a distance education-based program that relies heavily on technology. For optimal participation and learning experiences students are required to have a high-speed broadband or cable internet speed of at least 1.5 Mbps and a computer that supports such internet speeds and applications. Additional electronic and reference materials will be provided to students via a program pack that will be sent at the start of the program.

Objectives

Upon completion of the Associate of Science in Polysomnographic Technology (ASPSGT) Degree, graduates will:

1. Be well-prepared entry-level polysomnographic technologists competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
2. Execute technology devices that measure sleep related problems (e.g., EEG, EOG, EMG, ECG)
3. Interpret in conjunction with the physician parameters of clinical sleep events.
5. Support and educate patients in their development of good sleep hygiene.
6. Demonstrate the ability to think critically and communicate effectively.
7. Articulate personal values in relation to ethical standards.
8. Display leadership through service-oriented activities.
9. Combine knowledge from liberal arts and sciences and polysomnography with critical thinking skills to function effectively as a polysomnographic technologist.

Associate of Science in Polysomnographic Technology Program

The Associate of Science in Polysomnographic Technology Program includes online instruction, skills lab instruction, and clinical experience. The curriculum encompasses five semesters. Graduates of the program are qualified for employment in a sleep clinic.

Admission Requirements for the Associate of Science Degree Program

To be considered for admission to the Associate of Science in Polysomnographic Technology Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below. Once the application and transcripts are received and it is determined the applicant meets the admission/academic requirements:

1. Demonstrate the stated level of achievement in one of the following areas:
   a. Earned a cumulative high school GPA of 2.25 or higher on a 4.0 scale;
   b. Earned a GED score of 450 or higher; or
c. Earned an ACT score of 19 or higher.

2. If the above criteria are not met, students may be admitted if they meet one of the following:
   d. Earned an associate degree or higher from a regionally accredited college or university with a cumulative GPA of 2.25 or higher on a 4.0 scale;
   e. Completed nine (9) college credit hours specific to the Mercy College PSGT Curriculum, achieved a grade of “C” or higher in each course, and earned a cumulative GPA of 2.25 or higher on a 4.0 scale; or
   f. Completed the Mercy College Polysomnographic Technology Certificate Program with a cumulative GPA of 2.25 or higher on a 4.0 scale.

3. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Algebra I, Biology, and English.

4. Provide documentation of a twelve-hour overnight observation in an American Academy of Sleep Medicine (AASM) accredited lab under the supervision of a Registered Polysomnographic Technologist (RPSGT). The program chair reviews completed files and sends information and forms for the observation experience. The observation must be completed prior to the applicant being scheduled for an interview.

5. An interview will be scheduled with the Polysomnographic Technology Program Committee once observation documentation is received. The applicant must achieve an interview score of 80% or higher with the Selection Committee.

6. Once a student has been accepted into the program, students must submit a clinical affiliation request form that will be sent to the student with their acceptance letter. This form will inform the program chair of the student’s clinical site where the student will attend all clinical hours associated with their study in the Polysomnographic Technology Program. All clinical sites must be accredited by the American Academy of Sleep Medicine (AASM) and the student must be directly under the supervision of a Registered Polysomnographic Technologist (RPSGT). The program chair will then contact the clinical site and send a clinical affiliation agreement to site. All clinical affiliation agreements must be signed by the clinical sites prior to the students beginning program courses.

7. Additional admissions requirements may be applicable, depending on the specific practice laws and regulations of the state in which the applicant resides.

Admission into the program is on a competitive basis. Meeting the minimum criteria does not guarantee admission into this program. Admission into Mercy College also does not guarantee admission into this program. 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 in order of their completed admission requirements and interview scores on a space available basis. Students who are not admitted into the program may re-apply for admission the following year. Students may find it helpful to complete liberal arts and sciences courses at Mercy College prior to program admission.

Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

Articulation of Transfer Credit to Polysomnographic Technology

 Applicants meeting admissions criteria who have completed polysomnographic 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 polysomnographic technology sequence at Mercy College. 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.
4. Availability of space in the appropriate polysomnographic 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 College Polysomnographic Technology Students. These abilities are based on the job requirements for Polysomnographic Technologist at Mercy Medical Center — Des Moines where most clinical experiences will occur. Applicants must review the following clinical standards to determine their ability and compatibility with the physical requirements of Polysomnographic Technology.

Physical Activity Requirements

Constant

- **Hearing**: Perceiving the nature of sounds at normal range in order to receive detailed information through oral communications, pagers, intercoms, telephones, etc.
- **Reaching**: Extending hand(s) and arm(s) in any direction as when operating/adjusting the various polygraphs, recorders and computers used during testing.
- **Fingering**: Picking, pinching, typing or otherwise working primarily with fingers rather than with the whole hand or arm as when using a computer keyboard or adjusting equipment controls.
- **Sitting**: For long periods of time while viewing patient data waveforms on a VDT.

Frequent

- **Walking**: For short to moderate distances in order to adjust equipment and assist or escort patients to or from other areas.
- **Talking**: Expressing or exchanging ideas or information by means of the spoken word accurately and quickly as when explaining test procedures to patients and communicating test information to other medical personnel.
- **Stooping**: Bending body downward and forward by bending at the waist as when applying or adjusting patient sensors and electrodes or obtaining supplies from storage areas.
- **Standing**: For moderate periods as when applying electrodes and sensors to sitting patients or making adjustments to recording equipment positioned at a height of 60 inches or more.

Occasional

- **Kneeling**: Bending legs at the knee to come to rest on knee or knees while adjusting equipment positioned at the bedside or removing supplies from storage areas.
- **Pushing**: Using upper extremities to press against a wheelchair or patient transport cart.
- **Pulling**: Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion as in helping patients into or out of bed.
- **Grasping**: Applying pressure to an object with fingers and palm as in using a stapler, paper punch or light pen.
- **Crouching**: Bending the body downward and forward by bending leg or spine while adjusting equipment or stocking or removing supplies from storage areas.
- **Lifting**: Raising objects from a lower to a higher position or moving patients horizontally from position to position as in lifting a package of recording paper or assisting patient into or out of bed.

Physical Demand Requirements

- Medium clinical assignments - 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 Requirements

During clinical assignments, students are required to use a computer terminal and visual inspection involving the use of machines and measurement devices.

Intellectual/Emotional Requirements

Students must be able to:

- 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.
- Perform repetitive work or to performing continuously the same work, according to set procedures, sequence or pace.
- Perform under stress when confronted with emergency, critical, unusual or dangerous situations or situations in which working top speed and sustained attention are make-or-break aspects of the job.
- Situations requiring the precise attainment of set limits, tolerance or standards.
- 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 and visitors and satisfactory job performance despite the stress of a hospital work environment.
• Deal with people beyond giving and receiving instructions.
• Perform a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.

Tools/Equipment
• Acetone
• Nasal CPAP/BIPAP/AutoPAP
• Pulse Oximeters
• Amplifiers
• Phone/Pagers
• Respiration Monitors
• RIP Systems
• Nasal/Oral Pressure Transducers
• Computers/Keyboards/Modems
• Polysomnographic Recording Systems
• Thermistors
• Electrodes/ Electrode Paste
• Printers
• Video Recording and Playback Equipment

Clinical Conditions
• Students are not substantially exposed to adverse environmental conditions.
• Students are exposed to hazards such as contaminated needles, exposure to chemicals and/or exposure to biohazards.
• 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.

Graduation Requirements ASPSGT Degree
Student must meet the following requirements to receive an Associate of Science in Polysomnographic Technology Degree:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-“).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete all skill challenge exams.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.
Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.

**Associate of Science in Polysomnographic Technology (Online) Curriculum Guide**

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.

**Program Required Liberal Arts and Science Courses**

- *BIO 180 Human Anatomy (with Lab) (4 cr)
- *CMP 120 Computer Informatics (3 cr)
- *ENG 101 English Composition (3 cr)
- *MED 101 Medical Terminology (1 cr)
- *PHY 101 Physics (with Lab) (4 cr)
- BIO 185 Human Physiology (with lab) (4 cr)
- PSY 202 Developmental Psychology (3 cr)
- BIO 302 Pathophysiology (3 cr)
- PHI 110 Critical thinking in a Diverse World (3 cr)

Asterisk (*) indicates the course is a prerequisite for admission to the program.

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

**Major Program Requirements**

- PST 111 Fundamentals of Polysomnographic Technology I (4 cr)
- PST 112 Polysomnographic Instrumentation (4 cr)
- PST 113 Clinical Practicum I (2 cr)
- PST 121 Fundamentals of Polysomnographic Technology II (4 cr)
- PST 122 Applied Polysomnography (4 cr)
- PST 123 Clinical Practicum II (2 cr)
- PST 131 Clinical Practicum III (8 cr)
- PST 132 Professional Seminar (3 cr)
- PST 241 Advanced Polysomnography (3 cr)
- PHI 320 Bioethics (3 cr)
- HCA 301 Health Care Delivery in the United States – A Consumer Perspective (3 cr)

Service Learning Project (0 cr) (Graduation Requirement)
Associate of Science in Polysomnographic Technology (Online) Curriculum Plan

Students enrolling in Polysomnography Technology may transfer BIO 180, BIO 185, and PHY 101 from a regionally accredited institution of higher learning or enroll in these courses at Mercy College of Health Sciences in a classroom environment. Students needing to take these courses are encouraged to take them on campus at Mercy College of Health Sciences if they reside within reasonable driving distance of the campus. Students who are unable to attend these courses on campus will need to take them at a regionally accredited institution close to where they live and have the credits transferred. Students are strongly advised to check with the Mercy College of Health Sciences Registrar’s office to ensure any course(s) they plan to transfer in meets Program curriculum requirements.

Recommended Courses Sequence

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with Lab)</td>
<td>4 cr</td>
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<tr>
<td>CMP 120</td>
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<td>English Composition</td>
<td>3 cr</td>
</tr>
<tr>
<td>MED 101</td>
<td>Medical Terminology</td>
<td>1 cr</td>
</tr>
<tr>
<td>PHY 101</td>
<td>Physics (with Lab)</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

Credit Hours: 15

Semester II (Spring)

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PST 111</td>
<td>Fundamentals of Polysomnographic Technology I</td>
<td>4 cr</td>
</tr>
<tr>
<td>PST 112</td>
<td>Polysomnographic Instrumentation</td>
<td>4 cr</td>
</tr>
<tr>
<td>PST 113</td>
<td>Clinical Practicum I</td>
<td>2 cr</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>1 cr</td>
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</table>

Credit Hours: 14

Semester III (Summer)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>BIO 185</td>
<td>Human Physiology (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>PST 121</td>
<td>Fundamentals of Polysomnographic Technology II</td>
<td>4 cr</td>
</tr>
<tr>
<td>PST 122</td>
<td>Applied Polysomnography</td>
<td>4 cr</td>
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<tr>
<td>PST 123</td>
<td>Clinical Practicum II</td>
<td>2 cr</td>
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Credit Hours: 14

Semester IV (Fall)

<table>
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<tr>
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<tbody>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3 cr</td>
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<tr>
<td>PSY 202</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PST 131</td>
<td>Clinical Practicum III</td>
<td>8 cr</td>
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</table>

Credit Hours: 14
Semester V (Spring)

BIO 302    Pathophysiology    (3 cr)
PHI 110    Critical thinking in a Diverse World    (3 cr)
MAT        Math (100 level or higher)    (3 cr)
PST 132    Professional Seminar    (3 cr)

Credit Hours: 12

Semester VI (Summer)

HCA 301    Health Care Delivery in the United States – A Consumer Perspective (3 cr)
PHI 320    Bioethics    (3 cr)
PST 241    Advanced Polysomnography    (3 cr)
SVL 285    Servant Leadership    (3 cr)

Credit Hours: 12 Total
Credit Hours: 81
Associate of Science in 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 liberal arts and sciences courses and hospital and clinical based professional education. Guided by the mission of Mercy College, the philosophy of the School of Allied Health 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 should 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 should 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:
   - Accurately manipulate radiographic equipment
   - Accurately position patients
   - Correctly set radiographic techniques
   - Provide quality patient care
4. Encourage students in their professional development and pursuit of lifelong learning.
   Student Learning Outcomes:
   - 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 program will complete the program
   - 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 educational program
   - Employers will hire graduates
   - Of those seeking employment in radiology, graduates will be employed within six months of graduation

Objectives
Upon completion of the Radiologic Technology Associate Degree, 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 Associate of Science in Radiologic Technology (ASRT) Degree program at Mercy College provides students with the academic and clinical experiences needed to become caring, ethical, and competent radiographers. Students acquire the knowledge, skills, and attitudes needed to safely utilize X-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 ASRT program the student will be awarded the Associate of Science in Radiologic Technology Degree from Mercy College.

The graduate may apply to write 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. Information concerning application for the Registry Examination and the Permit to Practice 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 Associate of Science in Radiologic Technology Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses: Algebra I, Algebra II, and Biology.
2. First-time College Students:
   a. Earn a cumulative GPA of 2.7, and
   b. Minimum ACT composite score of 20 or higher.
3. Transfer Students:
   a. Earn a cumulative GPA of 2.7 or higher on a 4.0 scale at the last college attended (minimum of nine (9) credits), or
   b. Complete nine (9) college credit hours specific to the Mercy College ASRT Curriculum, achieve a grade of “C” or higher (not “C-”) in each course.
4. The Program Chair reviews completed files and sends information with the appropriate forms needed for the observation experience. Your observation experience will be completed at Mercy Medical Center in the radiology department. Achieve an interview score of 80% or higher. The interview will be held the same day as your observation. Interviews and observations must be completed by February 28.

**Program Application Deadlines**

Applications for summer RT program admission consideration must be received by the Admissions Department by January 1 for consideration. Admission to the College may be completed earlier, but no later than January 1. Prospective students have until February 28 to complete the interview/observation or their program application will be rolled forward to the next available academic term. Admission to the RT Program will be announced after March 1st.

<table>
<thead>
<tr>
<th></th>
<th>Program Application Deadline</th>
<th>Transcript Deadline</th>
<th>Observation Deadline</th>
<th>Interview Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Semester</td>
<td>January 1</td>
<td>January 15</td>
<td>February 28</td>
<td>February 28</td>
</tr>
</tbody>
</table>
Admission into this program is on a competitive basis. Meeting the minimum criteria does not guarantee admission into this program. Admission into Mercy College also does not guarantee admission into this program. Applicants are selected for the Radiologic Technology program according to a point system encompassing all the admission criteria. 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 program may re-apply to the program for the following year. Students may find it helpful to complete liberal arts and sciences courses at Mercy College prior to program admission. All Radiologic Technology courses are taught in the daytime only.

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 ASRT Degree program. 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 and the Iowa Permit to Practice are the responsibility of the graduate. Information regarding these costs is provided to the student during the last semester of the program and upon request.

Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog.

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 College. 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.
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 College Radiologic Technology Students. These abilities are based on the job requirements for Radiographers at Mercy Medical Center — Des Moines where most clinical experiences will occur. 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 assignments – 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 including, 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 ASRT Degree**
Student must meet the following requirements to receive an Associate of Science in Radiologic Technology Degree:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete all skill challenge/FCE exams.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.
7. In order for the College to certify to a federal, state or local government agency or professional licensing organization that a student has completed the program, 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 College.

**Policies**
**Radiation Safety**
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 College, 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 400mrem/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, Nuclear Medicine Technology, Medical Assistant, 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 College at no cost to the student.

To assure student safety:

- The Radiation Safety Officer (RSO) reviews radiation monitoring badge reports.
- Radiation monitoring badge reports are discussed at the quarterly Radiation Safety Committee (RSC) meeting. The Nuclear Medicine Technology, Medical Assisting, and Radiologic Technology Program Chairs are members of this committee.
- If a student’s exposure exceeds 400 mrem in one calendar quarter, he/she receives a letter, is counseled, receives a second monitoring badge, and exposure is recorded by the RSO.
- Monthly radiation monitoring badge reports are posted for student review and maintained in the Program Chair or clinical coordinator’s office.
- Coursework covers information on radiation monitoring devices and radiation protection in greater detail.

**Pregnancy**

A student who becomes pregnant during this program may advise the Program Chair. Students reserve the right to undeclare a pregnancy. If a student declares a pregnancy in writing she will be counseled about revisions in her clinical schedule that may be needed to attain academic and program clinical competencies. The student’s time in the program may need to be lengthened to ensure all competencies are attained prior to graduation from the program. The student has the option to continue in the program without modifications.

RAD 101 course provides students with information on protecting oneself from exposure to ionizing radiation and includes an in-depth explanation of the Pregnancy Policy. This information is provided prior to clinical assignments.

*Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.*
Radiology Curriculum Guide

All students must complete the General Education Core requirements. Requirements can be following the Academic Policies and Procedures section of the Catalog.

Some courses listed below may fulfill general education requirements.

**Program Required Liberal Arts and Science Courses**

*BIO 180  Human Anatomy (with lab) (4 cr)
*BIO 185  Human Physiology (with lab) (4 cr)

*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.

**Major Program Requirements**

RAD 101  Foundations of Radiologic Imaging (2 cr)
RAD 104  Principles of Radiologic Imaging (2 cr)
RAD 110  Applied Radiography I (3 cr)
RAD 111  Clinical Practicum I (2 cr)
RAD 114  Principles of Radiologic Imaging II (2 cr)
RAD 120  Applied Radiography II (3 cr)
RAD 116  Imaging Systems (3 cr)
RAD 121  Clinical Practicum II (2 cr)
RAD 130  Applied Radiography III (2 cr)
RAD 131  Clinical Practicum III (5 cr)
RAD 202  Radiographic Pathology (3 cr)
RAD 203  Advanced Patient Care (2 cr)
RAD 205  Radiation Physics (3 cr)
RAD 210  Applied Radiography IV (2 cr)
RAD 211  Clinical Practicum IV (3 cr)
RAD 215  Radiation Biology (3 cr)
RAD 220  Applied Radiography V (3 cr)
RAD 221  Clinical Practicum V (3 cr)

**Recommended Courses Sequence**

**Semester I (Summer)**

MAT 100 level or higher (3 cr)
RAD 101  Foundations of Radiologic Imaging (2 cr)
RAD 104  Principles of Radiologic Imaging I (2 cr)
RAD 110  Applied Radiography I (3 cr)

Total Credits: 10
### Semester II (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 111</td>
<td>Clinical Practicum I</td>
<td>2 cr</td>
</tr>
<tr>
<td>RAD 114</td>
<td>Principles of Radiologic Imaging II</td>
<td>2 cr</td>
</tr>
<tr>
<td>RAD 120</td>
<td>Applied Radiography II</td>
<td>3 cr</td>
</tr>
<tr>
<td>SVL 285</td>
<td>Servant Leadership</td>
<td>3 cr</td>
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Total Credits: 17

### Semester III (Spring)

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<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 185</td>
<td>Human Physiology (with lab)</td>
<td>4 cr</td>
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<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 116</td>
<td>Imaging Systems</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 121</td>
<td>Clinical Practicum II</td>
<td>2 cr</td>
</tr>
<tr>
<td>RAD 130</td>
<td>Applied Radiography III</td>
<td>2 cr</td>
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<tr>
<td></td>
<td>Social Science Elective</td>
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Total 17 credits

### Semester IV (Summer)

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<th>Course Title</th>
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<tbody>
<tr>
<td>RAD 131</td>
<td>Clinical Internship III</td>
<td>5 cr</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>1 cr</td>
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Total Credits: 6

### Semester V (Fall)

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<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>RAD 202</td>
<td>Radiographic Pathology</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 203</td>
<td>Advanced Patient Care</td>
<td>2 cr</td>
</tr>
<tr>
<td>RAD 205</td>
<td>Radiation Physics</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 210</td>
<td>Applied Radiography IV</td>
<td>2 cr</td>
</tr>
<tr>
<td>RAD 211</td>
<td>Clinical Practicum IV</td>
<td>3 cr</td>
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Total Credits: 13

### Semester VI (Spring)

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>RAD 215</td>
<td>Radiation Biology</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 220</td>
<td>Applied Radiography V</td>
<td>3 cr</td>
</tr>
<tr>
<td>RAD 221</td>
<td>Clinical Practicum V</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>Core elective</td>
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</tr>
<tr>
<td></td>
<td>Humanities elective</td>
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Total Credits: 15

**Total Program Credits: 78**

RAD classes have to be taken in the semester that is recommended. All RAD classes in each semester are corequisites of each other.
Surgical Technology Programs

Purpose

The Surgical Technology Program offers a Certificate and/or an Associate of Science in Surgical Technology (ASST) Degree. The program is accredited by the Commission on Accreditation of Allied Health Education Programs.

Surgical Technologists prepare for the surgical procedure by organizing instruments, setting up sterile drapes, pouring sterile solutions, and gowning and gloving surgeons and other surgical team members. Surgical Technologists assist surgeons by positioning patients on the operating room table, holding retractors, passing instruments, and applying a sterile dressing after the surgical procedure is completed. The surgical technologist's job is to maintain a field of sterility in the operating room. Surgical Technologists, also known as scrub-techs are crucial members of the surgical team. They assist in surgical procedures under the supervision of surgeons, registered nurses, and anesthesiologists.

Program Goals and Outcomes

Upon completion of the Surgical Technology Certificate, the graduate will:

1. Demonstrate professional behavior based on the surgical technology standards of practice.
2. Demonstrate psychosocial, cognitive, and psychomotor skills necessary to perform the role of an entry-level surgical technologist.
3. Practice as a surgical technologist guided by a caring philosophy grounded in the core values of Mercy.
4. Relate total quality management concepts to the operating room environment.
5. Demonstrate the ability to think critically.
6. Demonstrate the ability to communicate effectively.
7. Contribute to global patient care by serving as a team member who monitors the surgical environment along with other team members.

Upon completion of the Surgical Technology Associate Degree, the graduate will demonstrate the objectives of the certificate program and, in addition, will:

1. Integrate information and knowledge for application to each patient situation.
2. Articulate personal values in relation to ethical standards.
3. Display leadership through service-oriented activities.
4. Combine knowledge from liberal arts and sciences and surgical science with critical thinking skills to problem solve when functioning as a surgical technologist.

Surgical Technology Certificate Program

The Surgical Technology Certificate Program includes classroom instruction, lab instruction in operating room techniques, and clinical experience in hospital and surgery centers. Clinical skills are enhanced as the student increases their knowledge and confidence under the guidance of a clinical instructor and preceptors in a surgical setting.

The Surgical Technology Certificate curriculum encompasses three semesters. All graduates will sit for the National Board of Surgical Technologist and Surgical Assisting (NBSTSA) certification exam at the end of the program. The fee for this exam is included in the tuition.

Associate of Science in Surgical Technology Program

An Associate of Science in Surgical Technology (ASST) Degree may be earned by taking the 72 credit hours specified in the ASST curriculum.
Admission Requirements for the Certificate Program

To be considered for admission to the Surgical Technology Certificate Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Demonstrate the stated level of achievement in one of the following areas:
   a. Earn a high school or college (minimum of 9 credits) cumulative GPA of 2.5 or higher on a 4.0 scale; or
   b. Earn a GED score of 450 or higher; or
   c. Earn an ACT composite score of 18 or higher; or
   d. Earned an associate degree or higher from a regionally accredited college or university; or
   e. Completed nine (9) college credit hours specific to the Mercy College Curriculum, achieved a grade of “C” or higher in each course, and earned a cumulative GPA of 2.5 or higher on a 4.0 scale.

2. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.5 (“C” not “C-”) on a 4.0 scale in each of these required courses: pre-Algebra and Biology.

3. Interview with the Surgical Technology Selection Committee.

Admission Requirements for the Associate of Science Program

To be considered for admission to the Associate of Science in Surgical Technology Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Demonstrate the stated level of achievement in one of the following areas:
   a. Earn a high school or college (minimum of 9 credits) cumulative GPA of 2.5 or higher on a 4.0 scale; or
   b. Earn a GED score of 450 or higher; or
   c. Earn an ACT composite score of 18 or higher; or
   d. Earned an associate degree or higher from a regionally accredited college or university; or
   e. Completed nine (9) college credit hours specific to the Mercy College Curriculum, achieved a grade of “C” or higher in each course, and earned a cumulative GPA of 2.5 or higher on a 4.0 scale.

2. Demonstrate completion of one year of high school or one semester of college-level coursework with a grade of at least a 2.5 (“C” not “C-”) on a 4.0 scale in each of these required courses: pre-Algebra and Biology.

3. Interview with the Surgical Technology Selection Committee.

Post-Academic Program Admission Procedure

Refer to the Post-Academic Program Admission Procedure found in the School of Allied Health Section of the Catalog for all Surgical Technology programs.

Articulation of Transfer Credit to Surgical Technology

Applicants meeting admissions criteria who have completed surgical technology courses at another institution may apply for transfer credit. The courses must have been completed at a CAAHEP accredited Surgical Technology Program no more than two years prior to the semester in which the student enrolls in the surgical technology sequence at Mercy College. 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.
4. Availability of space in the appropriate surgical 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 College Surgical Technology Students. These abilities are based on the job requirements for Surgical Technologists at Mercy Medical Center — Des Moines, the site of most clinical experiences in the Surgical Technology Program. Applicants must review these standards to determine their ability and compatibility with the requirements of surgical technologists.

**Physical Activity Requirements**

**Constant**
- **Talking and hearing** - to exchange information and ideas by means of spoken word both by phone and in person.
- **Standing** - while functioning in the scrub role.
- **Walking** - usually at average speed, but occasionally faster, when obtaining supplies, etc.

**Frequent**
- **Lifting** - while moving patients, supplies, equipment, etc.
- **Kneeling** - bending, stooping, crouching while performing perioperative duties (retrieving supplies, counting sponges, changing suction containers, etc.).
- **Grasping** - while handling surgical instruments.
- **Fingering** - working primarily with fingers including sutures, needles, etc.
- **Pushing and pulling** - while moving patients, equipment.
- **Climbing** - while using stairway between locker area and operating room and between Inventory Control and operating room.

**Physical Demand Requirements**

Heavy clinical assignments - Exerts up to 20 pounds very frequently while lifting instrument trays; may exert up to 100 pounds of force while lifting patients.

**Visual Acuity Requirements**
- Preparing and reading written documentation.
- Working with small sutures, needles, etc.
- Good hand-eye coordination.
- Peripheral vision.
- Ability to work with microscope.
- Subject to extremes in lighting.

**Intellectual/Emotional Requirements**

Students must be able to:
- Maintain a high standard of courtesy and cooperation in dealing with colleagues, patients, and visitors, and perform job functions satisfactorily despite the stress of a hospital work environment.
- Adapt to performing 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 strict adherence to established procedures and guidelines.
- Perform under stress when confronted with emergency, critical, or unusual situations.

**Tools/Equipment**

Standard operating room equipment including, but not limited to, all types of surgical instrumentation, cautery, lasers, microscopes, video systems, and power equipment. Use of phone, computer terminal and written material may be required.

**Clinical Conditions**
- Students are subject to temperature changes from hot (75 degrees) to cold (65 degrees), depending on patient conditions.
• Students are subject to noise from various types of surgical equipment.
• Students are subject to vibration - from drills, saws, etc.
• Students are subject to hazards from electrical equipment, mechanical parts, lasers, etc.
• Students are subject to gases and fumes (example: bone cement).
• Students in the clinical setting have been identified as having the likelihood of occupational exposure to blood or other potentially infectious material and, therefore, are included in the OSHA Exposure Control Plan with all its specifications for preventing contact with the above materials.

**Graduation Requirements ST Certificate**

Student must meet the following requirements to receive a Surgical Technology Certificate:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.5 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours.
4. Successfully complete all skill challenge exams.

**Graduation Requirements ASST Degree**

Student must meet the following requirements to receive an Associate of Science in Surgical Technology Degree:

1. Successfully complete all liberal arts and sciences and professional education courses in the curriculum plan with a grade of “C” or higher (not “C-”).
2. Attain a cumulative grade point average (GPA) of at least 2.5 on a 4.0 scale.
3. Complete the College residency requirement of 15 credit hours at the associate level.
4. Successfully complete all skill challenge exams.
5. Complete the Communication Competency Requirement.
6. Complete the Service Learning Project.

*Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.*
Surgical Technology Certificate Curriculum Guide

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.

Program Required Liberal Arts and Science Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Crs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with Lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Microbiology (with Lab)</td>
<td>4</td>
</tr>
<tr>
<td>PHI 110</td>
<td>Critical Thinking in a Diverse World</td>
<td>3</td>
</tr>
</tbody>
</table>

Servant Leadership Workshop embedded in ST courses.

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

Major Program Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Crs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUR 101</td>
<td>Introduction to Surgical Technology</td>
<td>4</td>
</tr>
<tr>
<td>SUR 109</td>
<td>Principles and Practices of Surgical Technology (with lab)</td>
<td>7</td>
</tr>
<tr>
<td>SUR 131</td>
<td>Surgical Techniques and Procedures</td>
<td>6</td>
</tr>
<tr>
<td>SUR 132</td>
<td>Clinical I</td>
<td>6</td>
</tr>
<tr>
<td>SUR 140</td>
<td>Pharmacology for the Surgical Technologist</td>
<td>2</td>
</tr>
<tr>
<td>SUR 162</td>
<td>Clinical II/Preceptorship</td>
<td>6</td>
</tr>
<tr>
<td>SUR 163</td>
<td>Professionalism for the Surgical Technologist</td>
<td>2</td>
</tr>
</tbody>
</table>

Recommended Courses Sequence

Semester I (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Crs</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>SUR 101</td>
<td>Introduction to Surgical Technology</td>
<td>4</td>
</tr>
<tr>
<td>SUR 109</td>
<td>Principles and Practices</td>
<td>7</td>
</tr>
</tbody>
</table>

Credit Hours: 15

Semester II (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Crs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUR 131</td>
<td>Surgical Techniques and Procedures</td>
<td>6</td>
</tr>
<tr>
<td>SUR 132</td>
<td>Clinical I</td>
<td>6</td>
</tr>
<tr>
<td>SUR 140</td>
<td>Pharmacology for the Surgical Technologist</td>
<td>2</td>
</tr>
</tbody>
</table>

Credit Hours: 14
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 203</td>
<td>Microbiology (with lab)</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>PHI 110</td>
<td>Critical Thinking in a Diverse World</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>SUR 162</td>
<td>Clinical II/Preceptorship</td>
<td>(6 cr)</td>
</tr>
<tr>
<td>SUR 163</td>
<td>Professionalism for the Surgical Technologist</td>
<td>(2 cr)</td>
</tr>
</tbody>
</table>

Servant Leadership Workshop (0 cr)

Credit hours: 15

**Total Credit Hours 44**
Surgical Technology ASST Curriculum Guide

Some courses listed below may fulfill general education requirements.

**Program Required Liberal Arts and Science Courses (ASST)**

General Education Completion Credit Hours: 26 credits past ST Certificate

Associate of Science in Surgical Technology Completion Curriculum Plan

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 level or higher Math</td>
<td>(3 cr)</td>
<td></td>
</tr>
<tr>
<td>100 level or higher Humanities</td>
<td>(3 cr)</td>
<td></td>
</tr>
<tr>
<td>BIO 185</td>
<td>Human Physiology</td>
<td>(4 cr)</td>
</tr>
<tr>
<td>BIO 302</td>
<td>Pathophysiology</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition 1</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition 2</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>(3 cr)</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>(1 cr)</td>
</tr>
<tr>
<td>SVL 285</td>
<td>Servant Leadership</td>
<td>(3 cr)</td>
</tr>
</tbody>
</table>

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

**Major Program Requirements**

*SUR 201 Perioperative Professional Issues (2 cr)

**TOTAL ASST Program Credits: 72**

*Students must complete the Surgical Technology Certificate curriculum prior to completion of this course.

Students may complete the Surgical Technology Associate curriculum prior to or following completion of the other required coursework, and in any sequence (with the exception of SUR 201).

*Students in this associate degree program may pursue the Bachelor of Science in Health Care Administration or Bachelor of Science in Health Science at Mercy College.*
School of Liberal Arts and Sciences

Purpose

The purpose of liberal arts and sciences at Mercy College is to enhance a student’s knowledge, skills, and attitudes, thereby contributing to each student’s development as a person and each student’s ability to participate meaningfully in society. The School of Liberal Arts and Sciences Curriculum is designed to facilitate this within each candidate for the associate and baccalaureate degrees. To this end, the liberal arts and science curriculum is designed to establish a liberal arts and science foundation that facilitates personal development by enhancing the student’s ability to contribute to the achievement of the institutional and core curriculum outcomes.

Post-Academic Program Admission Procedure

Once applicants have been notified of their admission to an academic program within the School of Liberal Arts and Sciences, a student must:

Participates in a Professional Program session, if applicable.

Students who fail to complete any of the program post-admission procedures may delay or end the enrollment process and their provisional program admission status may be revoked.

Liberal Arts and Sciences Courses

Below is a comprehensive list of Liberal Arts and Sciences Courses available at the College.

Education

EDU 301 Educational Methodologies (3cr)
EDU 350 Education Psychology (3cr)
EDU 410 Curriculum Development (3cr)
EDU 430 Staff and Professional Development (3cr)
EDU 440 Public Health Advocacy (3cr)
EDU 480 Essentials of Preceptorship (3cr)

Humanities

ART 120 Art Appreciation (3cr)
ENG 095 College Preparatory Writing (3cr)
ENG 101 English Composition I (3cr)
ENG 102 English Composition II (3cr)
ENG 330 Special Topics in Literature (3cr)
ENG 335 Literature and Medicine (3cr)
ESL 095 ESL Communications and College Preparatory Course (3cr)
HIS 236 History of the Modern World (3cr)
HUM 120 Introduction to Film (3cr)
MUS 120 Music Appreciation (3cr)
PHI 110 Critical Thinking in a Diverse World (3cr)
PHI 280 Caring in a Diverse Health Care Environment (3cr)
PHI 301 Critical Thinking (3cr)
PHI 302 Applied Critical Thinking (3cr)
PHI 314 Ethics (3cr)
PHI 320 Bioethics (3cr)
RDG 095 College Preparatory Reading (3cr)
SPA 101 Spanish I (3cr)
SPA 102 Spanish II (3cr)
SPE 105 Small Group Communication (1cr)
SVL 285 Servant Leadership (3 cr)
The 301 Comparative Christian Traditions (3cr)
The 320 New Testament Analysis (3cr)
The 334 Comparative World Religions (3cr)

Math Sciences
MAT 095 Pre-Algebra (3cr)
MAT 102 Math for General Studies (3cr)
MAT 120 College Algebra (3 cr)
STA 330 Biostatics (3cr)
STA 402 Statistics (3cr)
STA 470 Advanced Research (3cr)

Natural Sciences
BIO 095 Introductory Biology (3cr)
BIO 101 General Biology I Lec/Lab (3cr)
BIO 102 General Biology II Lec/Lab (4cr)
BIO 180 Human Anatomy Lec/Lab (4cr)
BIO 185 Human Physiology Lec/Lab (4cr)
BIO 203 Microbiology Lec/Lab (4cr)
BIO 302 Pathophysiology (4cr)
BIO 320 Genetics Lec/Lab (3cr)
BIO 360 Immunology (4cr)
BIO 400 Pathogenic Microbiology Lec/Lab (3cr)
BIO 410 Advanced Anatomy Lec/Lab (3cr)
BIO 450 Histology and Embryology Lec/Lab (4cr)
BIO 460 Cell and Molecular Biology (4cr)
CHE 095 Introductory Chemistry Lec/Lab (3cr)
CHE 101 Chemistry I Lec/Lab (3cr)
CHE 102 Chemistry II Lec/Lab (4cr)
CHE 320 Organic Chemistry Lec/Lab (4cr)
CHE 321 Organic Chemistry II Lec/Lab (4cr)
CHE 420 Biochemistry Lec/Lab (4cr)
NTR 205 Nutrition (3cr)
NTR 300 Applied Nutrition (3cr)
PHA 202 Pharmacology (3cr)
PHY 101 Physics I Lec/Lab (4cr)
PHY 102 Physics II Lec/Lab (4cr)

**Social Sciences**
ECN 202 Economics (3cr)
PSY 101 General Psychology (3cr)
PSY 202 Developmental Psychology (3cr)
PSY 240 Gerontology and Aging (3cr)
PSY 303 Abnormal Psychology (3cr)
PSY 410 Social Psychology (3cr)
SOC 102 Sociology (3cr)
SOC 360 Death, Dying and Bereavement (3cr)
SOC 415 A Social Justice Approach to Social Issues (3cr)

**General**
CMP 120 Computer Informatics (3cr)
MED 101 Medical Terminology (1cr)
Bachelor of Science in Health Care Administration (Online)

Purpose

The Bachelor of Science in Health Care Administration (BSHCA) Program is based on the core values of Mercy and guided by the mission, goals, and objectives of Mercy College. Faculty members of the Health Care Administration Program believe that success in today’s highly technological and rapidly changing world of health care administration requires leaders who have 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. Graduates should develop the leadership skills necessary to balance the competing health care values of reasonable cost, high quality, and access.

In addition to preparing decisive, knowledgeable, flexible, and effective administrators, faculty members believe in preparing leaders who are caring, ethically and legally responsible, and intuitively responsive to the needs of those who are served. A leader is one whose actions, decisions, and speech include the qualities of integrity, creativity, and compassion within the health care organization and in the larger community served by the health care organization.

Objectives

Upon completion of the Bachelor of Science Health Care Administration Degree, the graduate will:

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 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

Admission Requirements

To be considered for the Bachelor of Science in Health Care Administration Program, students must be admitted to Mercy College (See College Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program.

1. Achieve a minimum cumulative GPA of 2.5 on a scale of 4.0 for all applicable college transfer work.
2. Achieve a grade of “C” or higher (not “C-“) in all transferred health care administration core courses.
3. Interview with Health Care Administration Program Chair.

If a student does not meet program admission requirements, but does meet College admission requirements, the student is considered a pre-Health Care Administration student. After completion of at least 9 credits with a minimum cumulative GPA of 2.5, the student can be considered for program admission.

Health Care Administration (BS) (Online) 121 mchs.edu
Post-Academic Program Admission Procedure

Participation in HCA420 - Practicum I and HCA421 - 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 program.

- National Certified Background Check
- Proof of immunizations including current TB
- HIPAA ((Health Insurance Portability and Accountability Act) agreement form
- Proof of a flu shot, if applicable

Graduation Requirements BSHCA Degree

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

1. Complete all College requirements and procedures for graduation.
2. Earn a grade of “C” or higher (not “C-”) in all required courses.
3. Earn a cumulative grade point average (GPA) of at least 2.0 on a 4.0 scale.
4. Complete the Service Learning Project.
5. Complete the Communication Competency Requirement.
6. Complete the Health Care Administration portfolio.
7. Complete the Health Science Reasoning Test.
8. Complete all course work within six years following admission into the program.
9. Complete 30 credit hours in residence at Mercy College, of which 15 credit hours of 300 and/or 400 level HCA courses must be taken.
**Bachelor of Science in Health Care Administration (Online) Curriculum Guide**

Core Curriculum Courses – 44 credits

1. **Humanities - 6 credits**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHI301 Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Humanities elective – 100 level or higher</td>
<td>3</td>
</tr>
</tbody>
</table>

2. **Cultural Appreciation and Diversity Coursework - 3 credits**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Appreciation and Diversity elective</td>
<td>3</td>
</tr>
</tbody>
</table>

3. **Natural Sciences – 7 credits**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Sciences – 100 level or higher</td>
<td>7</td>
</tr>
</tbody>
</table>

4. **Math – 9 credits**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Math – 100 level or higher</td>
<td>3</td>
</tr>
<tr>
<td>STA330 Biostatistics (3 cr) or 300 or higher level statistics class</td>
<td>3</td>
</tr>
<tr>
<td>STA420 Research Methodologies (3 cr)</td>
<td>3</td>
</tr>
</tbody>
</table>

5. **Social Sciences – 6 credits**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100 level or higher</td>
<td>6</td>
</tr>
</tbody>
</table>

6. **Science/Social Science Elective – 3 credits**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100 level or higher</td>
<td>3</td>
</tr>
</tbody>
</table>
7. Communication – 7 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SPE105</td>
<td>Small Group Communication</td>
<td>1</td>
</tr>
</tbody>
</table>

8. SVL 285: Servant Leadership – 3 credits (100 level or higher)

9. Program Courses – 39 credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCA301</td>
<td>Health Care Delivery in the U.S. - A Consumer Prospective</td>
<td>3</td>
</tr>
<tr>
<td>HCA303</td>
<td>Health Care Economics</td>
<td>3</td>
</tr>
<tr>
<td>HCA304</td>
<td>Human Resources Management in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA305</td>
<td>Principles of Management &amp; Leadership in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA320</td>
<td>Marketing Strategies in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA324</td>
<td>Information Resources in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA404</td>
<td>Legal/Ethical Aspects of Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA410</td>
<td>Special Topics in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>HCA415</td>
<td>Health Care Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>HCA420</td>
<td>Practicum I</td>
<td>3</td>
</tr>
<tr>
<td>HCA421</td>
<td>Practicum II</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 2 of the following three courses:
- HCA 412 Long Term Care: Organization and Administration (3 cr)
- HCA 413 Hospitals: Organization & Administration (3 cr)
- HCA 414 Ambulatory Care Services: Organization & Administration (3 cr)

10. General Electives/Additional Courses - 39 credits required

* Credits earned in a professional healthcare program (i.e., nursing or allied health program) or an earned associate/bachelor degree may apply toward the additional coursework and electives. Number of credits awarded depends on type of licensure/certification earned from an accredited institution; contact program chair for more information.

Total Program Credits: 122
Bachelor of Science in Health Science

Purpose
The Bachelor of Science in Health Science (BSHS) Program 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, clinical laboratory science, nuclear medicine technology, industrial research and design, and pharmacology.

Objectives
Graduates of the Bachelor of Health Science degree/program 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)

Four 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 program at Mercy College and wish to begin coursework towards this bachelor’s degree at the same time (dual enrollment in both programs). 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 program at Mercy College 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 Clinical Laboratory Science (CLS) certificate (See the CLS 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 CLS certificate when the certificate is completed in the final year of the program. Acceptance into Track Three does not guarantee acceptance in the Mercy College CLS certificate program. Students will follow the admissions procedures described in the Mercy College CLS certificate section. Students who are accepted into the Mercy College CLS program, and successfully complete the year-long curriculum, will graduate with both a BSHS degree with a certificate in CLS. Students who are not accepted or do not complete the CLS certificate program 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 are eager to prepare for further graduate education and wish to obtain the Nuclear Medicine Technology (NMT) certificate (See the NMT certificate section). One hundred (100) credits will be earned under the Track Four curriculum plan and an additional 25 credits awarded for the NMT certificate when
the certificate is completed in the final year of the program. Acceptance into Track Four does not guarantee acceptance in the Mercy College NMT certificate program. Students will follow the admissions procedures described in the Mercy College NMT certificate section. Students who are accepted into the Mercy College NMT program, and successfully complete the year-long curriculum, will graduate with both a BSHS degree and a certificate in NMT. Students who are not accepted or do not complete the NMT certificate program have the option to complete all requirements within the Track One curriculum plan at the time of transition.

Admissions Requirements

To be considered for admission to the Bachelor of Science in Health Science Program, applicants must be admitted to Mercy College (See College Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences as a pre Health Science student.

1. First-time college students:
   a. Earn a cumulative GPA of 2.5 or higher on a 4.0 scale, and
   b. Minimum ACT composite score of 21.

2. Transfer students:
   a. Complete nine (9) college credit hours specific to the Mercy College BSHS curriculum, achieve a grade of “C” or higher (not C-) in each course, and
   b. Earn a cumulative GPA of 2.5 or higher on a 4.0 scale at the last college attended (minimum of nine (9) credits), or
   c. Earned an associate or bachelor’s degree from an accredited institution with a cumulative GPA of 2.5 or higher on a 4.0 scale.

3. Current Mercy College students who wish to dual enroll in an Associate of Science and BSHS degree:
   a. Have a cumulative GPA of 2.5 or higher on a 4.0 scale on courses completed at Mercy College.

4. Interview with the Program Chair of BSHS.

Post-Academic Program Admission Procedure

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 program.

- National Certified Background Check
- Proof of immunizations including current TB
- HIPAA ((Health Insurance Portability and Accountability Act) agreement form
- Proof of a flu shot, if applicable

Graduation Requirements BSHS Degree

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

1. Completion of all required courses with a “C” or higher in all courses (not a “C-“).
2. An overall grade point average of 2.0 on a 4.0 scale, including all transfer courses.
3. Complete 30 credit hours at Mercy College, of which 15 credit hours of 300 and/or 400 level course work must be taken.
4. Successfully complete all practicum requirements.
5. Complete the Communication Competency Requirement.
6. Complete all Mercy College requirements and procedures for graduation including the Health Science Reasoning Test
7. Complete of coursework and graduation requirements within six years following admission into the program.
8. Complete the Service Learning Project.
**Bachelor of Science in Health Science Curriculum Guide – 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.

**Natural Sciences Coursework**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>General Biology I (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIO 102</td>
<td>General Biology II (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIO 180</td>
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<td>BIO 410</td>
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<td>PHY 102</td>
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**Total Credits: 65**

**Communications Coursework**

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<tr>
<td>SPE 105</td>
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**Total Credits: 7**

**Humanities Coursework**

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<tr>
<td>PHI 301</td>
<td>Critical Thinking (must be taken last semester)</td>
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**Total Credits: 6**
Cultural Appreciation and Diversity Coursework

Cultural Appreciation and Diversity Elective (3 cr)

Total Credits: 3

Servant Leadership Coursework

SVL 285 Servant Leadership (3 cr)

Total Credits: 3

Social Sciences Coursework

PSY 101 General Psychology (3 cr)
PSY 202 Developmental Psychology (3 cr)
PSY 303 Abnormal Psychology (3 cr)
SOC 102 Sociology (3 cr)
Social Sciences Elective (300/400 Level) (3 cr)

Total Credits: 15

Mathematical Sciences Coursework

MAT 120 College Algebra or higher level of Math (such as calculus, but not a statistics course) (3 cr)
STA 330 Biostatistics, 300 or higher statistics course (3 cr)

Total Credits: 6

Health Sciences Coursework

BHS 300 Practicum I (2 cr)
Med 101 Medical Terminology (1 cr)

Total Credits: 3

Health Sciences Track One Coursework (3 cr)

BIO 460 Cell and Molecular Biology (2 cr)
BHS 400 Practicum II (3 cr)
BHS 465 Health Assessment (3 cr)
NTR 205 Nutrition (3 cr)
STA 420 Research Methodologies (3 cr)
STA 470 Advanced Research (3 cr)

Total Credits: 17

BSHS Degree Program Total Credits: 125
### Bachelor of Science in Health Science Completion Curriculum Guide - 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 program at Mercy College.

**Degree Requirement Coursework**

Associate or Bachelor’s degree (17 cr)

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.

#### Natural Sciences Coursework

<table>
<thead>
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**Total Credits: 65**

#### Communications Coursework

<table>
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<td>3 cr</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communications</td>
<td>1 cr</td>
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**Total Credits: 7**
**Humanities Coursework**

- HUM Humanities Elective (3 cr)
- PHI 301 Critical Thinking (must be taken last semester) (3 cr)

**Total Credits: 7**

**Cultural Appreciation and Diversity Coursework**

- Cultural Appreciation and Diversity Elective (3 cr)

**Total Credits 3**

**Servant Leadership Coursework**

- SVL 285 Servant Leadership (3 cr)

**Total Credits: 3**

**Social Sciences Coursework**

- PSY 101 General Psychology (3 cr)
- PSY 202 Developmental Psychology (3 cr)
- PSY 303 Abnormal Psychology (3 cr)
- SOC 102 Sociology (3 cr)
- Social Sciences Elective (300/400 Level) (3 cr)

**Total Credits: 15**

**Mathematical Sciences Coursework**

- MAT 120 College Algebra or higher level of Math (such as calculus, but not a statistics course) (3 cr)
- STA 330 Biostatistics, 300 or higher statistics course (3 cr)

**Total Credits: 6**

**Health Sciences Coursework**

- BHS 300 Practicum I (2 cr)
- MED 101 Medical Terminology (1 cr)

**Total Credits: 3**

**BSHS Degree Program Total Credits: 125**
Bachelor of Science in Health Science Curriculum Guide – Track Three

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

Natural Sciences Coursework

<table>
<thead>
<tr>
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<td>BIO 203</td>
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<td>(4 cr)</td>
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<td>BIO 302</td>
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<tr>
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<tr>
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Total Credits: 60

Communications Coursework

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Total Credits: 7

Humanities Coursework

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<tr>
<td>PHI 301</td>
<td>Critical Thinking (must be taken last semester)</td>
<td>(3 cr)</td>
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Total Credits: 6
Cultural Appreciation and Diversity Coursework
Cultural Appreciation and Diversity Elective (3 cr)
Total Credits: 3

Servant Leadership Coursework
SVL 285 Servant Leadership (3 cr)
Total Credits: 3

Social Sciences Coursework
PSY 101 General Psychology (3 cr)
SOC 102 Sociology (3 cr)
Total Credits: 6

Mathematical Sciences Coursework
MAT 120 College Algebra or higher level of Math (such as calculus, but not a statistics course) (3 cr)
STA 330 Biostatistics, 300 or higher statistics course (3 cr)
STA 420 Research Methodologies (3 cr)
Total Credits: 9

Health Sciences Coursework
BHS 300 Practicum I (2 cr)
MED 101 Medical Terminology (1 cr)
Total Credits: 3

Management Coursework (one of the following)
HCA 301 Health Care Delivery in the United States (3 cr)
HCA 413 Hospital: Organization and Administration (3 cr)
Total Credits: 3

Clinical Laboratory Science Requirement Coursework
CLS Certificate (25 cr)
BSHS Degree Program Total Credits: 125
Bachelor of Science in Health Science Curriculum Guide – Track Four

Track Four is designed for students who wish to obtain the BSHS degree with an emphasis in Nuclear Medicine Technology.

Natural Sciences Coursework

<table>
<thead>
<tr>
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Total Credits: 60

Communications Coursework

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Total Credits: 7

Humanities Coursework

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Total Credits: 6

Cultural Appreciation and Diversity Coursework

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<tr>
<td>Cultural Appreciation and Diversity Elective</td>
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Total Credits: 3
Servant Leadership Coursework
SVL 285 Servant Leadership (3 cr)

Total Credits: 3

Social Sciences Coursework
PSY 101 General Psychology (3 cr)
SOC 102 Sociology (3 cr)

Total Credits: 6

Mathematical Sciences Coursework
MAT 120 College Algebra or higher level of Math (such as calculus, but not a statistics course) (3 cr)
STA 330 Biostatistics, 300 or higher statistics course (3 cr)
STA 420 Research Methodologies (3 cr)

Total Credits: 9

Health Sciences Coursework
BHS 300 Practicum I (2 cr)
MED 101 Medical Terminology (1 cr)

Total Credits: 3

Management Coursework (one of the following)
HCA 301 Health Care Delivery in the United States (3 cr)
HCA 413 Hospital: Organization and Administration (3 cr)

Total Credits: 3

Nuclear Medicine Technology Requirement Coursework
NMT Certificate (25 cr)

BSHS Degree Program Total Credits: 125
School of Nursing

Philosophy of the School of Nursing

The following statements, based on the philosophy and objectives of Mercy College, represent the beliefs of the faculty regarding the nursing education experience. The School of Nursing Philosophy incorporates concepts from the metaparadigm of nursing and the core values of Mercy.

**Caring relationships** begin with the personal integration of the core values of Mercy and the professional values of altruism, autonomy, human dignity, and social justice and are the basis for holistic nursing care. A caring relationship is 'being with' and 'doing for' that encourages individuals to reach their optimum comfort and functioning by fostering trust and hope. It is characterized by a fundamental belief in the value of each individual, including respect for diversity, beliefs, and lifestyle choices. Care of the self is foundational to caring relationships.

**Individuals** are holistic beings with an integrated body, mind, and spirit possessing inherent dignity, worth, and the right to be treated with respect, concern, and caring. Individuals possess unique abilities, beliefs, values, and life experiences as they progress through developmental stages throughout the life span. All human beings have certain functional health patterns in common that contribute to their health, quality of life, and achievement of human potential. An individual becomes a patient when served by the health care provider. Recipients of nursing care may be individuals, families, groups, communities, or multicultural populations. Individuals may also be termed clients depending on the context or setting.

**Health** is a phenomenon defined by an individual’s perception of his/her holistic well-being. It is also a dynamic state unique to all individuals involving response to changes in the internal and external environment. Optimum comfort and functioning is achieved through interaction with the health care system. The ability of patients to maintain and promote health and prevent illness is enhanced by their interaction with the health care system. The health care system, a diverse, evolving, dynamic network of supportive services within the global environment, is directed at meeting the health care needs of individuals and groups. Global health implies that the nurse has an understanding of the implications of information technology that links all parts of the world. Global health care is provided when the nurse utilizes knowledge of the global environment in which care is provided.

The environment is composed of internal and external factors that influence the response of individuals and groups experiencing potential or actual alterations in health. Nurses have a commitment to help individuals and groups achieve their desired health potential by influencing the environment.

Nursing is a caring profession that recognizes the unique value of the individual. The goals of nursing are to empower patients to promote, achieve, and/or maintain optimum comfort and functioning, and achieve a peaceful end of life. The professional nurse utilizes a broad knowledge base from the liberal arts and sciences taking into account complex ethical, social, cultural, legal, political, and economic principles. Nursing practice integrates a variety of processes when caring for the unique needs of individuals. Major processes used by the professional nurse include: nursing process; communication; critical thinking, which incorporates clinical decision-making; teaching/learning; and research. Caring interventions are evidence based nursing actions that contribute to competent nursing care. Nursing roles include but are not limited to provider of care, leader/manager, teacher, and member of the profession. The nurse functions collaboratively with other health care professionals and patients to provide and coordinate care in a variety of acute care and community-based settings.

**Students** are individuals with unique abilities, beliefs, values, and life experiences who enter the nursing education environment to gain knowledge and understanding of professional nursing practice. Students are expected to be self-directed and active participants in their education. The combination of learning experiences and caring relationships prepares graduates to demonstrate caring, competent practice; professional behaviors; lifelong learning; and service to communities.

**Faculty** are individuals committed to student learning. Faculty promotes critical thinking and clinical judgment, actively involving students in the educational process and engages in caring relationships with students to foster professional development. Each faculty member brings a unique personality, specialized education, and practice experiences to the educational environment. As specialized clinicians, faculty role-model professional behaviors and collaborate with other professionals, students, and individuals to promote caring, competent practice. Faculty is
responsible for the ongoing development and implementation of a curriculum that meets the needs of diverse students.

Nursing education is the teaching/learning process by which faculty and students collaborate to assist students to achieve educational goals. Faculty fosters a caring environment to optimize learning experiences empowering students to form caring relationships with patients and other recipients of nursing care. The Mercy curriculum is based on professional standards that are an integration of knowledge, skills and attitudes from the disciplines of nursing and the liberal arts and sciences. Teaching methodologies include active learning, technology and distance modalities. Teaching/learning processes enable students to develop critical thinking skills and nursing practice competencies. Active involvement of learners in their continuous educational process and the self-directed pursuit of knowledge facilitate their achievement of specific goals. Nursing education can no longer be limited to a specific setting. The focus of nurse educators is that nursing occurs wherever the nurse and patient are located. This belief is the foundation for community-based nursing education.

Glossary

Caring Interventions
Caring interventions are nursing actions performed to provide holistic nursing care (nursing care provided with consideration of all aspects of the patient: body, mind, and spirit) using the nursing process for individuals, families, groups, and communities. Caring relationships are at the center of caring interventions. The nurse demonstrates professional behaviors in the delivery of caring nursing interventions.

Communication
Communication is the complex, active process of relating to individuals and groups, which may include health team members, by written, verbal, and nonverbal means. The goal is to understand and be understood and involves the transmission of ideas, messages, emotions, and information by various means, between individuals and groups. Therapeutic communication promotes caring relationships between nurses and patients.

Community-Based Nursing
Community-based nursing occurs in a variety of settings within the community and is directed toward individuals and families. Community-based nursing practice focuses on promoting and maintaining the health of individuals and groups, preventing and minimizing the progression of disease, and improving quality of life.

Critical Thinking
Critical thinking is a disciplined, cognitive process for gathering, organizing, and analyzing relevant data for the purpose of guiding clinical decision-making and creatively solving problems.

Clinical decision-making: organized, sequential reasoning process, which includes assessment, analysis, planning, implementation and evaluation.

Evidence Based Nursing Practice
Evidenced-based practice is the use of best clinical evidence in making patient care decisions. Nursing actions are based on current knowledge, theory, and research.

Global Health Care
Global health care knowledge refers to an understanding of the effects of globalization on health care including disease transmission, economics and health policy.

Professional Behaviors
Professional behaviors, based on professional standards of nursing practice, are characterized by patient advocacy, a commitment to the profession of nursing, and accountability for actions and behaviors carried out within ethical, social, legal, political, and economical frameworks.

Service
Service is action that provides for the common good and involves a sense of community responsibility.

Teaching/Learning Process
Teaching/learning is a reciprocal process involving the exchange of information that occurs between students, faculty, and patients.
Mercy College Association of Nursing Students (MCANS)

The faculty of Mercy College supports the concept of nursing students enhancing their professionalism through student participation in professional organizations. In support of this, all new students in the Associate of Science in Nursing Program are encouraged to become members of the Mercy College Association of Nursing Students (MCANS). This 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 fund raising 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.

General School Policies

The following policies apply to all academic programs within the School.

Failed Course Policy

1. A maximum of one failed (C- or lower) nursing course may be repeated. Failure of or withdrawal from the repeated nursing course, or failure of a second nursing course will result in dismissal from the nursing program. A student may withdraw from any course one time only. A student may withdraw from a maximum of two clinical courses in the ASN program.
2. Students failing a nursing course or liberal arts and sciences program required course prior to the official end of the semester may finish the other courses in which they are enrolled that semester.
3. Students (ASN and BSN) may repeat one LAS program course and continue once enrolled in the first nursing course of the program. A second failure of a LAS program course (after enrollment in the first nursing program course) will result in dismissal from the Nursing program. The student must have at least a “C” in all required LAS courses to progress in the nursing program.
4. Failed (Grade of “F”) liberal arts and sciences courses that are not part of the program curriculum plan are not subject to the above Failed Course Policy.
5. A repeated nursing course must be taken within one year after failing the course. A student who does not take the failed course within one year after failing the course will need to follow the readmission policy to the College. (See Academic Leave and Readmission to the College Policy.) Students who exceed one year must take placement exams for each didactic, lab, and clinical program course the student has completed prior to the last date of attendance to evaluate the student’s retention of knowledge and clinical skills. Students will be placed in the Nursing Program based on the results of the placement exams.
6. Students re-admitted to the Nursing after being academically dismissed from the ASN program must begin the program at the first semester. Re-admitted students who fail any nursing or liberal arts and sciences course will be terminally dismissed from nursing program.
7. BSN Integrated students only: Failure (C- or lower) of an ASN or BSN Nursing or LAS course will require withdrawal from the BSN Integrated Program. Withdrawal from the Integrated Program will require the development of a new curriculum plan with an ASN Advisor.

Incomplete Grade Policy

Students who are unable to complete a program requirement within a semester because of extenuating circumstances may request an Incomplete. The program chair/coordinator or appropriate Dean will determine if the student is able to be promoted to the next semester with an outstanding “I” incomplete grade. Students with an “I” incomplete grade in a prerequisite course(s) will not be promoted to the next semester. Student with an “I” incomplete grade in a clinical course may be promoted depending on the reason for the “I” incomplete. At the discretion of the instructor, deadlines for satisfying an Incomplete grade can be from a few days to 30 calendar days after the end of the semester in which the incomplete grade occurred. An Incomplete contract must be completed by instructor and student. Students will be required to pay a clinical make up fee. (See Financial Information section.)

National Background Check and Electronic Health Records as Post Admission Requirement for Academic Programs

To ensure the safety of all clients served by Mercy College students and to meet regulations of our clinical partners regarding student participation in clinical site rotations as determined by the 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 program that includes a clinical, preceptorship, internship, or similar experiences 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 program with clinical, preceptorship, or internship opportunities, students will be required to establish an account with CertifiedBackground.com and provide the necessary fees directly to the vendor, in order to conduct these checks and collect these health records in order to finalize admission to the academic program. 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 program or remain in the academic program. Students who are unable to fulfill the clinical standards of the profession may also not be able to be admitted to that specific academic program.

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 College) or as part of the information supplied to the vendor at the time of admission to an academic program may also result in a denial of admission to the academic program.

A student’s background is checked based on information obtained from the student’s residency history. When the College 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 College Background Check Review Committee. Students who have a criminal record may be denied admission to an academic program. 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 College 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 College. 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 program. In cases where a licensure/certification board does grant permission to eventually test for certification/licensure following successful graduation from a Mercy College academic program, the College makes no stipulations on the ability of the student to find employment within the certification/licensure career field.

**Post-Academic Program Admission Procedure (ASN & BSN Programs)**

Once applicants have been notified of their provisional admission to an academic program within the School of Nursing, a student must, by the dates stated in the provisional admission letter:

1. Initiate a criminal background and a child and adult abuse check with CertifiedBackground.com along with the required payment to the vendor. The student must authorize CertifiedBackground.com to provide the results of these checks as part of the final verification for admission to the academic program.

2. Complete documentation needed on immunizations located on the Profile Tracker at CertifiedBackground.com. It is advised to submit the Immunization form to your primary health care provider as soon as possible in order to ensure its completion in advance of the academic program admission deadline established by the Program Chair. The Immunization form verifies compliance with the following:
   a. Two-step TB skin testing done within the past year; then a TB Skin test yearly after admission. If a positive PPD or history, a negative chest x-ray report.
   b. Begin the Hepatitis B series or a positive Hepatitis B Surface antibody titer, or provide a letter from student’s physician stating need for exemption.
   c. Measles, mumps, rubella (MMR vaccine) two doses or titers of all three diseases showing full immunity.
   d. Chicken Pox (Varicella): proof of disease by physician documentation or a positive titer or two doses of Varicella vaccine.

3. Complete the Clinical Standards form located on the Profile Tracker at CertifiedBackground.com. The Program Chair may, at their discretion, also require proof of seasonal flu vaccination prior to participation in courses that include a clinical rotation during flu season.
4. Submit proof of completion and current certification to the Profile Tracker at CertifiedBackground.com in American Heart Association CPR for the Health Care Provider (including adult, infant, child, 1 and 2 rescuer CPR, AED, and use of a Bag-Valve Mask), if applicable.

5. ASN students must meet one of the following criteria to demonstrate competency in mathematical ability:
   a. Achieve a mathematics score of 22 or higher on the ACT test or a mathematics score of at least 480 on the SAT within the last two years.
   b. Achieve a grade of “C” (not “C-”) or higher in a college-level algebra course within the last two years.
   c. Achieve a scaled mathematics score of 80 or greater on the pre-algebra domain of the COMPASS test within the last two years. If a student does not achieve a score of 80 on the COMPASS exam, the student must take either MAT 095 Pre-Algebra or MAT 120 College Algebra prior to or concurrent with the first semester of the nursing program. College credit is awarded for MAT 095 but the credit does not transfer nor does it apply to credits hours in ASN Program Curriculum Plan.

6. Attend a Professional Program Day session.

7. Program Chairs may require additional pre-admission documentation, at their discretion, that will be located on the Profile Tracker at CertifiedBackground.com. Deadlines for completion will be noted on the Tracker.

   Students who fail to complete any of the program post-admission procedures may delay or end the enrollment process and their provisional program admission status may be revoked.

**Promotion Policy for ASN, RN to BSN and BSN Students**

To be promoted to the next semester, students must:

1. Complete all course work (School of Nursing Programs required liberal arts and sciences and professional education courses) as stated in the curriculum plan for the current semester.
2. Complete all course work (School of Nursing Programs required liberal arts and sciences and professional education courses) in the curriculum plan with a grade of “C” or higher (not “C-”).
3. Maintain a cumulative GPA of 2.0 each semester.
4. Complete all clinical requirements for the semester.

Based on satisfactory or unsatisfactory completion of the promotion standards, students will be promoted to the next semester, delayed promotion to the next semester of the curriculum plan, or dismissed from the program. The student may also be subject to academic dismissal from the College. Students dismissed from a program and are not dismissed from the College may continue taking liberal arts courses at Mercy College. If multiple nursing courses are offered within a semester, the student may take the other courses within that semester, and then repeat the failed course. The student may not be promoted to the next semester until all prerequisite courses within the semester have been successfully completed. They may also qualify to apply for readmission to their program of study or admission to an other program of study.
Associate of Science in Nursing

PLEASE NOTE: Students seeking admission to the Associate of Science in Nursing Program will be required to complete BIO 180 Human Anatomy (college-level anatomy) in advance of enrolling in NSG 101/102.

Purpose

The Associate of Science in Nursing (ASN) Degree Program leads to initial eligibility for the registered nurse licensing examination. Graduates are prepared to provide entry-level, holistic nursing care for diverse clients in structured settings.

The five-semester curriculum is based on a total of 72 credit hours, which includes 33 credits from liberal arts and sciences and 39 credits of nursing. Mercy College serves as a sending institution (ASN Degree Program) in the Iowa Articulation Plan for Nursing Education.

BSN Integrated option for ASN students seeking a Bachelor of Science in Nursing who have prior degrees or college experience

Associate of Science in Nursing Students who have completed a previous baccalaureate degree or a majority of the required liberal arts and science credits required for the Bachelor of Science in Nursing (BSN) may seek admission to the BSN Integrated option Program. The Integrated Option leads ASN students to initial eligibility for the registered nurse licensing examination, while progressing with their coursework toward a BSN degree. Graduates are prepared to provide entry-level, holistic nursing care for diverse clients in structured and other settings.

The Integrated Option is designed for full-time study; but all course work must be completed within four years after enrollment in the first required nursing course. This option is not an independent degree but a combination of the ASN Degree Program and the BSN degree program.

Objectives

Upon completion of the Nursing Associate Degree Program, the graduate will:

1. Demonstrate caring relationships through the personal integration of the core values of Mercy in performing nursing roles.
2. Utilize knowledge, skills, and attitudes acquired from the discipline of nursing and liberal arts and sciences to provide holistic caring in a variety of settings throughout the lifespan.
3. Utilize effective communication in the performance of nursing roles.
4. Demonstrate critical thinking based on nursing theory in the implementation of evidence-based nursing practice.
5. Implement the teaching/learning process in education to promote optimal comfort and functioning.
6. Incorporate leadership skills in managing care for individuals throughout the lifespan.
7. Demonstrate professional behaviors based on professional standards of practice including lifelong learning and service to communities.

Admission Requirements

To be considered for admission to the Associate of Science in Nursing Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Provide evidence of successful completion of the content of a 150-hour or greater nursing assistant course taught within the past five years to beginning nursing courses. Completion of the 150-hour nursing assistant course outside of Iowa will be reviewed by the Nursing Dean to determine similarity of course content and skilled competency.
2. Students seeking admission into the ASN Program must meet academic standards and prerequisite standards. If the 2.7 GPA standard is achieved, the prerequisite standard is considered separately from the academic standard.
3. **Academic Standards:** Candidates for admission will be considered for admission under the most recent of the following academic standards. Once the GPA Academic Standard or a 2.7 for admissions is satisfied, the candidate for admission must maintain a 2.0 GPA.
   a. **First-time College Students:**
      i. Earn a cumulative GPA of 2.7; and
      ii. Minimum ACT composite score of 20 or higher; or
      iii. Scholastic Aptitude Test (SAT) composite score of at least 950.
   b. **Transfer Students:**
      i. Complete nine (9) college credit hours specific to the Mercy College ASN Curriculum, achieve a grade of “C” or higher (not “C-”) in each course, and
      ii. Earn a cumulative GPA of 2.7 or higher on a 4.0 scale at the last college attended (minimum of nine (9) credits).
   c. **Students enrolled at Mercy College who seek admission into the ASN Program will be considered for admission under the following guidelines.**
      i. Complete a minimum of nine (9) credit hours at Mercy College
      ii. Earn a cumulative 2.7 GPA at Mercy College.

4. **Prerequisite standards**
   a. Demonstrate completion of one year of high school or one semester of college-level work with a grade of at least 2.0 (“C” not “C-”) on a 4.0 scale in each of these required courses:
      i. English
      ii. Biology
      iii. Chemistry.
   b. **Math requirement,**
      i. One year of high school Algebra I; or
      ii. One semester of college-level Pre-Algebra or Algebra I.
      iii. Students who need to meet this requirement at Mercy College will need to take either Math 095 or Math 105.

**Additional Admission Requirements for the BSN Integrated Option**
To be considered for admission to the BSN Integrated option Degree Program, applicants must meet the following criteria:

1. Candidates must have completed 30 transferable liberal arts and science credits with a cumulative GPA of at least 2.7 on a 4.0 scale.
2. Students will have an opportunity to join the BSN Integrated program during the first semester of the ASN program following an admission interview with BSN Faculty and development of an individualized curriculum plan.
3. Students are admitted into the BSN Integrated Program after the first time completion of NSG 101 with a grade of “B” or higher. Students must also achieve a grade of “C or higher” (not “C-“) in all required science courses. Students repeating science courses will not be considered for admission to the BSN Integrated program
4. **Admission Recommendations:**
   a. Previous bachelor degree.
   b. A commitment to coursework with limited employment responsibilities while a student.

**Admissions Requirements for Licensed Practical Nurses (LPN)**
Applicants with a LPN licensure may apply for admission to the Associate of Science in Nursing Program beginning with the second semester by meeting the following criteria:

1. Achieve satisfactory performance (75% minimum) on the NLN Nursing Acceleration Challenge Exam I PN-RN (administered by the School of Nursing).
2. Demonstrate satisfactory performance on a clinical skills challenge exam under the supervision of a Dean of Nursing (criteria provided for preparation).
3. Complete all required courses and program pre-requisites prior to the beginning of second semester.
Post Admission Procedure
Refer to the Post-Admission Procedure in the Nursing School Section of the catalog.

Advanced Placement for LPNs
Licensed Practical Nurses (LPNs) may apply for advanced placement by making formal application to Mercy College (see Admissions Information section). Candidates must have graduated from an accredited LPN program within one year prior to admission or have worked in a clinical setting for at least one of the two years prior to application for admission to Mercy College School of Nursing. A copy of the applicant’s current license to practice and official transcript from the LPN program must be submitted. Application materials for advanced placement must be submitted by designated dates. Advanced placement LPNs must score at least 85% on the LPN Challenge Exam to participate in the BSN Integrated Program.

BSN Courses for ASN Students
ASN students may take the following courses during the ASN program as long as pre-requisites are met: NSG 330, NSG 331, NSG 332, NSG 334, NSG 335, NSG 336, or NSG 338. No other RN to BSN nursing courses may be taken; however, BSN liberal arts and sciences may be taken as long as prerequisites are met.

Clinical Standards
The following clinical standards are required of Mercy College nursing students. These abilities are based upon requirements for Registered Nurses at Mercy Medical Center — Des Moines, the site of many clinical experiences in the nursing degree programs. Applicants must review the following clinical standards to determine their ability and compatibility with physical requirements of registered nurses.

**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 in order 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, ramps,
Physical Demand Requirements
Heavy clinical assignments - Exerting up to 65 pounds push/pull force to move frequently, and lifting up to 50 pounds occasionally, an 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:
- Read pertinent printed material and distinguish colors.
- Include inspection during patient care.
- 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 have the ability to:
- 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.
- Perform a variety of duties, often changing from one task to another without loss of efficiency or composure.
- Maintain a high standard of courtesy and cooperation in dealing with colleagues, patients, and visitors, and perform job functions satisfactorily despite the stress of a hospital work environment.

Tools/Equipment
Standard medical and nursing equipment and special equipment found in assigned areas.

Clinical Conditions
- 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.
- The student may be required to wear a face mask, gown and/or gloves.
- The student is subject to inside environmental conditions, protection from weather conditions but not necessarily from temperature changes.
- 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.

Graduation Requirements ASN Degree
To receive the Associate of Science in Nursing Degree, students must meet the following requirements:

1. Achieve a minimum cumulative GPA of 2.0 on a 4.0 scale.
2. Complete all nursing and liberal arts and sciences courses listed in the ASN Curriculum Plan with a grade of “C” or higher (not “C-”).
3. Pass all required clinical skill competencies.
4. Participate in all activities scheduled during Seminar Days. Sessions not attended must be made up.
5. Satisfactorily complete the College requirements:
   a. Service Learning Project,
   b. Communication Competency Requirement,
   c. College residency requirement of 15 credit hours.
6. Satisfactorily complete the ASN requirements:
   d. ASN portfolio essay and reflective essay.
   e. ATI Comprehensive RN Predictor exam and review course.
Assessment Technologies Institute (ATI) Comprehensive RN Predictor Exam Policy

Students will receive ATI study materials and assessments throughout the curriculum in preparation for the NCLEX-RN exam. The ATI Comprehensive RN Predictor Exam (administered in the ASN fifth semester) is designed to prepare students for successful completion of the NCLEX-RN examination. The benchmark is a composite score of 72%-73.3% which correlates with a 95% predicted probability of passing the NCLEX-RN as a first-time tester. One opportunity to take the exam will be offered during the latter part of the final semester. An optional repeat ATI Comprehensive RN Predictor Exam is available at no additional cost to the student. The recommendation is to take the exam initially prior to the ATI Live Review Course and repeat the Predictor Exam after the Live Review Course.
## Associate of Science in Nursing Curriculum Guide

All students must complete the General Education Core requirements. Requirements can be following the Academic Policies and Procedures section of the Catalog.

Some courses listed below may fulfill general education requirements.

### Program Required Liberal Arts and Sciences Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 180</td>
<td>Human Anatomy (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>BIO 185</td>
<td>Human Physiology (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 cr</td>
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<tr>
<td>BIO 302</td>
<td>Pathophysiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 202</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHA 202</td>
<td>Pharmacology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHI 110</td>
<td>Critical Thinking in a Diverse World</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Microbiology (with Lab)</td>
<td>4 cr</td>
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Total Credits: 33

### Major Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>NSG 101</td>
<td>Introduction to Professional Nursing Concepts</td>
<td>5 cr</td>
</tr>
<tr>
<td>NSG 102</td>
<td>Professional Nursing Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>NSG 131</td>
<td>Nursing Health Promotion Across the Life Span</td>
<td>5 cr</td>
</tr>
<tr>
<td>NSG 132</td>
<td>Professional Nursing Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>NSG 160</td>
<td>Nursing Care of Patients Across the Life Span I</td>
<td>6 cr</td>
</tr>
<tr>
<td>NSG 200</td>
<td>Nursing Care of Patients Across the Life Span II</td>
<td>6 cr</td>
</tr>
<tr>
<td>NSG 230</td>
<td>Nursing Care of Patients Across the Life Span III</td>
<td>6 cr</td>
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<tr>
<td>NSG 231</td>
<td>Role Transition to Professional Practice</td>
<td>6 cr</td>
</tr>
<tr>
<td>NSG 280</td>
<td>Caring in a Diverse Health Care Environment</td>
<td>3 cr</td>
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</table>

Total Credits: 39

### Recommended Course Sequence

**Prerequisite** (For students without this program prerequisite, a six semester plan of study will be necessary)

<table>
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<tr>
<td>BIO 180</td>
<td>Human Anatomy (with Lab)</td>
<td>4 cr</td>
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Total Credits: 4

### Semester I (Fall or Spring Start)

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Nursing (ASN) Curriculum 148 mchs.edu
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<tbody>
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<td>NSG 102</td>
<td>Professional Nursing Skills I</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
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**Semester II**

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**Semester III**

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<th>Course Title</th>
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<tr>
<td>NSG 160</td>
<td>Nursing Care of Patients Across the Life Span I</td>
<td>6 cr</td>
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<tr>
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<td>Pharmacology</td>
<td>3 cr</td>
</tr>
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<td>PHI 110</td>
<td>Critical Thinking in a Diverse World</td>
<td>3 cr</td>
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**Semester IV**

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<tr>
<td>NSG 280</td>
<td>Caring in a Diverse Health Care Environment</td>
<td>3 cr</td>
</tr>
<tr>
<td>SLP 999</td>
<td>Service Learning Project</td>
<td>0 cr</td>
</tr>
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<td></td>
<td><strong>Total Credits: 13</strong></td>
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</tbody>
</table>

**Semester V**

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<td>Nursing Care of Patients Across the Life Span III</td>
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<td>NSG 231</td>
<td>Role Transition to Professional Practice</td>
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<td></td>
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</table>

**ASN Degree Program Total Credits 72**

**Note:** Nursing courses must be taken sequentially.

_Students who successfully complete this associate degree program have the opportunity to advance into the RN to BSN, Health Care Administration, or Health Science at Mercy College._
BSN Integrated Option Curriculum Guide

General Education Requirements can be found in the General Education section of the Catalog.

Program Required Liberal Arts and Sciences Courses

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<tr>
<td>BIO 185</td>
<td>Human Physiology (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 302</td>
<td>Pathophysiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PSY 202</td>
<td>Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHA 202</td>
<td>Pharmacology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHI 110</td>
<td>Critical Thinking in a Diverse World</td>
<td>3 cr</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Microbiology (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
<td>3 cr</td>
</tr>
<tr>
<td>NTR 300</td>
<td>Applied Nutrition</td>
<td>3 cr</td>
</tr>
<tr>
<td>Math 100 level or higher</td>
<td></td>
<td>3 cr</td>
</tr>
<tr>
<td>PHI 320/314</td>
<td>Bioethics or Ethics</td>
<td>3 cr</td>
</tr>
<tr>
<td>STA 330</td>
<td>Biostatistics</td>
<td>3 cr</td>
</tr>
<tr>
<td>SPE 105</td>
<td>Small Group Communication</td>
<td>1 cr</td>
</tr>
<tr>
<td>SVL 285</td>
<td>Servant Leadership</td>
<td>3 cr</td>
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</table>

Total Credits: 52

Major Program Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 300</td>
<td>Choose 3 of the following</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 330</td>
<td>Pain/Palliative Care/End of Life Care</td>
<td></td>
</tr>
<tr>
<td>NSG 331</td>
<td>Social Injustice/Global Health</td>
<td></td>
</tr>
<tr>
<td>NSG 332</td>
<td>Gerontology</td>
<td></td>
</tr>
<tr>
<td>NSG 334</td>
<td>Genomics</td>
<td></td>
</tr>
<tr>
<td>NSG 335</td>
<td>Political Activism</td>
<td></td>
</tr>
<tr>
<td>NSG 336</td>
<td>Spirituality</td>
<td></td>
</tr>
<tr>
<td>NSG 338</td>
<td>Neuroscience Trends</td>
<td></td>
</tr>
<tr>
<td>NSG 411</td>
<td>BSN Professional Role I</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 412</td>
<td>Health Assessment in Nursing</td>
<td>4 cr</td>
</tr>
<tr>
<td>NSG 416</td>
<td>Information and Financial Management in Nursing</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 418</td>
<td>Introduction to Research</td>
<td>3 cr</td>
</tr>
</tbody>
</table>
NSG 423  Principles of Teaching/Learning (3 cr)
NSG 481  Community Health Nursing (4 cr)
NSG 483  Theories of Leadership and Management (3 cr)
NSG 485  BSN Professional Role II (3 cr)

**Total BSN Credits: 29**

**Total ASN Credits: 39**

**Total BSN Integrated Course Credits: 120**

**Recommended Course Sequence**

Curriculum Plan will be individualized for each student based on student transcript, the following suggested plan, established pre- and co-requisites, and available course schedule.

ASN courses must be taken in sequence; LAS courses must be taken according to prerequisite requirements.

**Prerequisite** (For students without this program prerequisite, a six semester plan of study will be necessary)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BIO 180 Human Anatomy (with Lab)</td>
<td>4 cr</td>
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**Semester I (Fall or Spring Start)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 185 Human Physiology (with Lab)</td>
<td>4 cr</td>
</tr>
<tr>
<td>ENG 101 English Composition I</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 101 Introduction to Professional Nursing Concepts</td>
<td>5 cr</td>
</tr>
<tr>
<td>NSG 102 Professional Nursing Skills I</td>
<td>1 cr</td>
</tr>
<tr>
<td>PSY 101 General Psychology</td>
<td>3 cr</td>
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<td></td>
<td>Total Credits: 16</td>
</tr>
</tbody>
</table>

**BSN Orientation**

**Semester II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 302 Pathophysiology</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 131 Nursing Health Promotion Across the Life Span</td>
<td>5 cr</td>
</tr>
<tr>
<td>NSG 132 Nursing Skills II</td>
<td>1 cr</td>
</tr>
<tr>
<td>PSY 202 Developmental Psychology</td>
<td>3 cr</td>
</tr>
<tr>
<td>SOC 102 Sociology</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>Total Credits: 15</td>
</tr>
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</table>

**Semester III**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 160 Nursing Care of Patients Across the Life Span I</td>
<td>6 cr</td>
</tr>
<tr>
<td>PHA 202 Pharmacology</td>
<td>3 cr</td>
</tr>
<tr>
<td>PHI 110 Critical Thinking in a Diverse World</td>
<td>3 cr</td>
</tr>
<tr>
<td></td>
<td>Total Credits: 12</td>
</tr>
</tbody>
</table>
**Semester IV**

BIO 203  Microbiology (with Lab) (4 cr)
NSG 200  Nursing Care of Patients Across the Life Span II (6 cr)
NSG 280  Caring in a Diverse Health Care Environment (3 cr)
Service Learning Project (0 cr)
Total Credits: 13

**Semester V**

NSG 230  Nursing Care of Patients Across the Life Span III (6 cr)
NSG 231  Role Transition to Professional Practice (6 cr)
Total Credits: 12

**Complete NCLEX – RN licensure examination**

**Semester VI**

NSG 481  Community Health Nursing (4 cr)
NSG 483  Theories of Leadership and Management (3 cr)
NSG 485  BSN Professional Role II (3 cr)
Total Credits: 10

**RN to BSN Curriculum**
Courses to be taken with ASN coursework at specified semesters.

**Courses may be taken during or after Semester I**

ENG 102  English Composition II (3 cr)
NTR 300  Applied Nutrition (3 cr)
Math 100 level or higher (3 cr)
Humanities (Religion/Philosophy) (3 cr)
STA 330  Biostatistics (3 cr)
SPE 105  Small Group Communication (1 cr)
SVL 285  Servant Leadership (3 cr)
Total Credits: 19

**Courses may be taken during or after Semester II.**

NSG 300  Choose 3 of the following (3 cr)
- NSG 330 Pain/Palliative Care/End of Life Care
- NSG 331 Social Injustice/Global Health
- NSG 332 Gerontology
- NSG 334 Genomics
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 335</td>
<td>Political Activism</td>
<td></td>
</tr>
<tr>
<td>NSG 336</td>
<td>Spirituality</td>
<td></td>
</tr>
<tr>
<td>NSG 338</td>
<td>Neuroscience Trends</td>
<td></td>
</tr>
<tr>
<td>NSG 411</td>
<td>BSN Professional Role I</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 416</td>
<td>Information and Financial Management in Nursing</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 418</td>
<td>Introduction to Research</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 423</td>
<td>Principles of Teaching/Learning</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

Total Credits: 15

**Courses may be taken during or after Semester III.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 412</td>
<td>Health Assessment in Nursing</td>
<td>4 cr</td>
</tr>
</tbody>
</table>

Total Credits: 4

**RN to BSN Integrated Degree Program Total Credits: 120**

**NOTE:** 150-hour Nursing Assistant course or equivalent course required prior to beginning the ASN portion of the BSN Integrated program.
Registered Nurse to Bachelor of Science in Nursing (RN to BSN) (Online)

Purpose
The Registered Nurse to Bachelor of Science in Nursing (RN to BSN) Program is an online program of study 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 Degree Program is designed for part-time or full-time study, but all course work must be completed within six years after enrollment in the first required nursing course. Mercy College serves as a receiving institution (BSN degree program) in the Iowa Articulation Plan for Nursing Education.

BSN Integration Option for ASN students with prior degrees/college wishing to enter the Bachelor of Science in Nursing

Associate of Science in Nursing students who have completed a previous baccalaureate degree or a majority of the required liberal arts and science credits required for the Bachelor of Science in Nursing (BSN) may seek admission to the BSN Integrated program. The BSN Integrated option leads ASN students to initial eligibility for the registered nurse licensing examination, while progressing with their coursework towards a BSN degree. Graduates are prepared to provide entry-level, holistic nursing care for diverse clients in structured and other settings.

The BSN Integrated option is designed for full-time study; but all course work must be completed within four years after enrollment in the first required nursing course. This option is not an independent degree but a combination of the ASN Degree Program as a sending institution and the BSN Degree Program as a receiving institution in the Iowa Articulation Plan for Nursing Education. (See the ASN Section for the additional admissions requirements and curriculum plans.)

Objectives
Upon completion of the RN to BSN program the graduate will:

1. Demonstrate caring relationships through the personal integration of the core values of Mercy while performing the roles of leader/manager, teacher, professional, and provider of care.
2. Accept each client as an individual, holistic being with an integrated body, mind, and spirit possessing internal and external factors that affect health.
3. Apply theoretical knowledge and principles derived from nursing, liberal arts, and sciences that serve as a foundation for providing therapeutic nursing interventions in the holistic care of diverse clients.
4. Utilize communication skills effectively while implementing the roles of the professional nurse.
5. Utilize a variety of processes when caring for the unique needs of diverse individuals to promote, achieve, and/or maintain their optimal health and preserve dignity in the dying process.
6. Utilize leadership/management strategies to effect change for the improvement of nursing care in structured and other settings.
7. Evaluate research for the applicability of findings to improve current and future nursing practice.
8. Demonstrate accountability by incorporating ethical, social, legal, political, and economic principles and professional standards into nursing practice decisions, with individuals, groups, and communities.
9. Value the need for life-long learning, service to the community and commitment to the improvement of the profession and the health care system.

Admission Requirements
To be considered for admission to the RN to BSN Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet the GPA program requirement below (9 credits are required).

1. Provide an official transcript from an accredited diploma or associate degree nursing program, and official transcripts from any other college(s).
2. Achieve a minimum cumulative GPA of 2.5 grade point average on a 4.0 scale.
3. Submit a copy of a current, valid license to practice as a Registered Nurse in the state of Iowa or demonstrate progress toward licensure.

Applicants desiring to begin RN to BSN course work who have not passed the NCLEX-RN examination may take nursing classes for one semester only. Full admission will be granted upon receipt of licensure.

**Post-Admission Procedure**

RN to BSN students may need to complete the Post-Admission Procedure at the time of clinical site selection. Refer to the Post-Admission Procedure found in the School of Nursing Section.

**Articulation Options**

1. The School of Nursing participates in the Iowa Articulation Plan. The Associate Degree Nursing Program participates as a sending institution and the RN to BSN Degree Program participates as a receiving institution.
2. Iowa Board of Nursing policies of the Iowa Articulation Plan for Nursing Education: RN to BSN Program will be followed by the School of Nursing.
3. At the time of admission to the RN to BSN Program, one of the three 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.
4. The RN to BSN Program consists of 120 credit hours: 68 credits in nursing and 52 credits in liberal arts and sciences. These totals may include up to 39 nursing credits and 27 liberal arts and sciences credits earned at the Associate Degree level.

**Graduation Requirements RN to BSN Degree**

Students must meet the following requirements to receive a RN to BSN Degree:

1. Complete all requirements of the RN to BSN curriculum plan.
2. Complete 30 credit hours in residence at Mercy College, of which 15 credit hours are at the 300 and/or 400 level NSG courses.
3. Complete all nursing courses with a grade of “C” or higher (not “C-”), and attain a cumulative GPA of at least 2.0 on a 4.0 scale.
4. Complete all course work within six years after enrollment in the first required nursing course.
5. Complete the Service Learning Project.
6. Complete the Communication Competency Requirement.
7. Complete the RN to BSN portfolio essay and summative reflective essay requirement.
RN to BSN Curriculum Guide

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.

Program Required Liberal Arts and Sciences Courses

*BIO 203 Microbiology (with Lab) (4 cr)
*BIO 180 Human Anatomy (with Lab) (4 cr)
*BIO 185 Human Physiology (with Lab) (4 cr)
*BIO 302 Pathophysiology (3 cr)
Cultural Appreciation & Diversity Elective (3 cr)
*ENG 101 English Composition I (3 cr)
ENG 102 English Composition II (3 cr)
Humanities Elective (3 cr)
Math 100 level or higher (3 cr)
NTR 300 Applied Nutrition (3 cr)
PHI 320 Bioethics (3 cr)
*PSY 101 General Psychology (3 cr)
*PSY 202 Developmental Psychology (3 cr)
*SOC 102 Sociology (3 cr)
SPE 105 Small Group Communication (1 cr)
STA 330 Biostatistics (3 cr)
SVL 285 Servant Leadership (3 cr)

Total Credits: 52

Major Course Requirements

Nursing RN Coursework (39* cr)
NSG 411 BSN Professional Role I (3 cr)
NSG 412 Health Assessment in Nursing (4 cr)
NSG 416 Information and Financial Management in Nursing (3 cr)
NSG 418 Introduction to Research and Evidence Based Practice (3 cr)
NSG 423 Principles of Teaching/Learning (3 cr)
NSG 300 Choose 3 of the following (3 cr)
NSG 330 Palliative Care/End of Life Care
NSG 331 Social Injustice / Global Health
NSG 332 Gerontology
NSG 334 Genomics
NSG 335 Political Activism
NSG 336 Spirituality
NSG 338 Neuroscience Trends
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NSG 481</td>
<td>Community Health Nursing</td>
<td>4 cr</td>
</tr>
<tr>
<td>NSG 483</td>
<td>Theories of Leadership and Management</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 485</td>
<td>BSN Professional Role II</td>
<td>3 cr</td>
</tr>
</tbody>
</table>

**Total Credits: 29**

**Total Credits Nursing RN Coursework: 39**

**Total Program Credits: 120**

### Recommended Course Sequence

**RN to BSN Curriculum Guide**

**Professional Component Coursework**

Nursing RN Coursework (39* cr)

Courses marked with an * asterisk are included in 66 credits articulated from the Associate Degree program (39 credits Nursing and 27 credits Liberal Arts and Sciences.) *Students with fewer than 66 credits of transferable nursing courses can use electives to meet the credit deficit.*

**Applied Credit Hours to Program (66 cr)**

**RN to BSN Nursing Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NSG 411</td>
<td>BSN Professional Role I</td>
<td>3 cr</td>
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<tr>
<td>NSG 412</td>
<td>Health Assessment in Nursing</td>
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<td>NSG 418</td>
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</tr>
<tr>
<td>NSG 423</td>
<td>Principles of Teaching/Learning</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 300</td>
<td>Choose 3 of the following</td>
<td>3 cr</td>
</tr>
<tr>
<td>NSG 330</td>
<td>Palliative Care/End of Life Care</td>
<td>1 cr</td>
</tr>
<tr>
<td>NSG 331</td>
<td>Social Injustice/Global Health</td>
<td>1 cr</td>
</tr>
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<td>NSG 332</td>
<td>Gerontology</td>
<td>1 cr</td>
</tr>
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<td>NSG 334</td>
<td>Genomics</td>
<td>1 cr</td>
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<td>NSG 335</td>
<td>Political Activism</td>
<td>1 cr</td>
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<td>NSG 336</td>
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<td>3 cr</td>
</tr>
<tr>
<td>NSG 485</td>
<td>BSN Professional Role II</td>
<td>3 cr</td>
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</tbody>
</table>

**Total Credits 29**
**Liberal Arts and Sciences Courses**

**Humanities Coursework**
- Cultural Appreciation & Diversity Elective (3 cr)
- *ENG 101 English Composition I (3 cr)
- ENG 102 English Composition II (3 cr)
- Humanities Elective (3 cr)
- PHI 320 Bioethics (3 cr)
- SPE 105 Small Group Communication (1 cr)

Total Credits 16

**Natural Sciences Coursework**
- *BIO 203 Microbiology (with Lab) (4 cr)
- *BIO 180 Human Anatomy (with Lab) (4 cr)
- *BIO 185 Human Physiology (with Lab) (4 cr)
- *BIO 302 Pathophysiology (3 cr)
- NTR 300 Applied Nutrition (3 cr)

Total Credits 18

**Social Sciences Coursework**
- *PSY 101 General Psychology (3 cr)
- *PSY 202 Developmental Psychology (3 cr)
- *SOC 102 Sociology (3 cr)

Total Credits 9

**Mathematical Sciences Coursework**
- Math 100 level or higher (3 cr)
- STA 330 Biostatistics (3 cr)

Total Credits: 6

**Servant Leadership**
- SVL 285 Servant Leadership (3 cr)

Total Credits: 3

**RN to BSN Degree Program Total Credits: 120**
Bachelor of Science in Nursing (BSN)

Purpose

The Bachelor of Science in Nursing (BSN) Program 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 Degree Program is designed for part-time or full-time study, but all course work must be completed within six years after enrollment in the first required nursing course.

The eight curriculum is based on a total of 120 credit hours, which includes 55 credits from liberal arts and sciences and 65 credits of nursing.

Objectives

Upon completion of the Bachelor’s Degree Program, the graduate will:
1. Demonstrate therapeutic caring relationships through personal integration of the Mercy Core Values.
2. Engage in professional nursing practice that is holistic, patient-centered and culturally sensitive for individuals, families and communities.
3. Integrate principles of quality management, technology and safety into nursing practice within healthcare organizations and systems.
4. Utilize theory, research and critical thinking in the delivery of nursing care.
5. Demonstrate leadership behaviors and inter-professional collaboration in the delivery of health care.
6. Advance a culture of excellence through lifelong learning, continuous professional development and self-care.

Admission Requirements

To be considered for admission to the Bachelor of Science in Nursing Program, applicants must be admitted to Mercy College (See Admissions section) and meet the criteria listed below. Admission to the College does not guarantee admission to a professional program. Upon being granted general College admission, students may enroll in Liberal Arts and Science (LAS) courses in the School of Liberal Arts and Sciences. Students are encouraged to take LAS courses at Mercy College to meet any unmet program requirements below.

1. Students seeking admission to the BSN program must earn a cumulative GPA of 2.5 on the LAS courses listed: English 101, College Level Math, General Psychology, Human Anatomy with lab, Human Physiology with lab and Microbiology with lab; and achieve a grade of “C” or higher (not “C-”) in each course.

Post Admission Procedure

Refer to the Post-Admission Procedure in the Nursing School Section of the catalog.

Clinical Standards

The following clinical standards are required of Mercy College nursing students. These abilities are based upon requirements for Registered Nurses at Mercy Medical Center — Des Moines, the site of many clinical experiences in the nursing degree programs. Applicants must review the following clinical standards to determine their ability and compatibility with physical requirements of registered nurses.

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 in order 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, and lifting up to 50 pounds occasionally, an 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:*
- Read pertinent printed material and distinguish colors.
- Include inspection during patient care.
- 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 have the ability to:*
- 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.
- Perform a variety of duties, often changing from one task to another without loss of efficiency or composure.
- Maintain a high standard of courtesy and cooperation in dealing with colleagues, patients, and visitors, and perform job functions satisfactorily despite the stress of a hospital work environment.

**Tools/Equipment**

Standard medical and nursing equipment and special equipment found in assigned areas.

**Clinical Conditions**

- 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.
- The student may be required to wear a face mask, gown and/or gloves.
- The student is subject to inside environmental conditions, protection from weather conditions but not necessarily from temperature changes.
• 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.

Graduation Requirements BSN Degree

To receive the Associate of Science in Nursing Degree, students must meet the following requirements:

1. Achieve a minimum cumulative GPA of 2.0 on a 4.0 scale.
2. Complete all nursing and liberal arts and sciences courses listed in the BSN Curriculum Plan with a grade of “C” or higher (not “C-”).
3. Pass all required clinical skill competencies.
4. Participate in all activities scheduled during Seminar Days. Sessions not attended must be made up.
5. Satisfactorily complete the College requirements:
   a. Service Learning Project,
   b. Communication Competency Requirement,
   c. College residency requirement of 15 credit hours.
6. Satisfactorily complete the BSN requirements:
   d. BSN portfolio essay and reflective essay.
   e. ATI Comprehensive RN Predictor exam and review course.

Assessment Technologies Institute (ATI) Comprehensive RN Predictor Exam Policy

Students will receive ATI study materials and assessments throughout the curriculum in preparation for the NCLEX-RN exam. The ATI Comprehensive RN Predictor Exam (administered in the BSN eighth semester) is designed to prepare students for successful completion of the NCLEX-RN examination. The benchmark is a composite score of 72.7%-73.3% which correlates with a 95% predicted probability of passing the NCLEX-RN as a first-time tester. One opportunity to take the exam will be offered during the latter part of the final semester. An optional repeat ATI Comprehensive RN Predictor Exam is available at no additional cost to the student. The recommendation is to take the exam initially prior to the ATI Live Review Course and repeat the Predictor Exam after the Live Review Course.
Bachelor Science in Nursing Curriculum Guide

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 Liberal Arts and Sciences Courses**

- **BIO 180:** Human Anatomy (with lab)* (4 cr)
- **BIO 185:** Human Physiology (with lab)* (4 cr)
- **BIO 203:** Microbiology (with lab)* (4 cr)
- **BIO 302:** Pathophysiology (3 cr)
- Cultural Appreciation & Diversity Elective (3 cr)
- **ENG 101:** English Composition I* (3 cr)
- **ENG 102:** English Composition II (3 cr)
- Humanities Elective (3 cr)
- Math 100 level or higher (3 cr)
- **PHA 202:** Pharmacology (3 cr)
- **PSY 101:** General Psychology* (3 cr)
- **PSY 202:** Developmental Psychology* (3 cr)
- Religion/Philosophy Elective (3 cr)
- **SOC 102:** Sociology (3 cr)
- **SPE 105:** Small Group Communication (1 cr)
- **NTR 300:** Applied Nutrition (3 cr)
- **STA 330:** Biostatistics (3 cr)
- **SVL 285:** Servant Leadership (3 cr)

Total Credits: 55

*Asterisk (*) indicates the course is a pre-requisite for the program.*

**Major Program Requirements**

- **NUR 180:** Philosophy and Theory of Nursing I (1 cr)
- **NUR 210:** Nursing Foundations I (4 cr)
- **NUR 215:** Nursing Competency I (1 cr)
- **NUR 220:** Nursing Foundations II (4 cr)
- **NUR 225:** Nursing Competency II (2 cr)
- **NUR 260:** Philosophy and Theory of Nursing II (3 cr)
- **NUR 275:** Holistic Assessment in Nursing (4 cr)
- **NUR 310:** Nursing Concepts and Practice I (4 cr)
- **NUR 315:** Nursing Concepts and Practice II (3 cr)
### Nursing Issues Courses (Choose 4 of the following)

- NUR 330: Pain and Palliative Care/End of Life Care (1 cr)
- NUR 331: Social Injustice/Global Health (1 cr)
- NUR 332: Gerontology (1 cr)
- NUR 334: Genomics (1 cr)
- NUR 335: Political Activism (1 cr)
- NUR 336: Spirituality (1 cr)
- NUR 338: Neuroscience Trends (1 cr)

### NUR 320:
- Nursing Concepts and Practice III (4 cr)

### NUR 325:
- Nursing Concepts and Practice IV (3 cr)

### NUR 370:
- Concepts of Teaching and Learning (3 cr)

### NUR 415:
- Nursing Concepts and Practice V (3 cr)

### NUR 416:
- Information and Financial Management in Nursing (3 cr)

### NUR 418:
- Introduction to Research (3 cr)

### NUR 425:
- Nursing Concepts and Practice VI (3 cr)

### NUR 430:
- Concepts of Community Health Nursing (4 cr)

### NUR 450:
- Concepts of Nursing Leadership (3 cr)

### NUR 460:
- Advanced Concepts of Nursing Practice (4 cr)

### NUR 465:
- Transition to Nursing Practice (2 cr)

**Total Credits: 65**

**Total BSN Credits: 120**

### Recommended Course Sequence

#### Semester 1

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BIO 180</td>
<td>Human Anatomy (with lab)</td>
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<td>ENG 101</td>
<td>English Composition I</td>
<td>3 cr</td>
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<td>Humanities Elective</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology</td>
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**Total Credits: 16**

#### Semester 2

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<td>BIO 185</td>
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<td>Microbiology (with lab)</td>
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<td>NUR 180</td>
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<td>Semester</td>
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<td>PSY 202: Developmental Psychology</td>
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<tr>
<td>Semester 3</td>
<td>BIO 302: Pathophysiology</td>
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<td>NUR 210: Nursing Foundations I</td>
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<td>NUR 220: Nursing Foundations II</td>
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<td>NUR 225: Nursing Competency II</td>
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<td>Semester 5</td>
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<td>NUR 310: Nursing Concepts and Practice I</td>
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<td>Semester 6</td>
<td>Cultural Appreciation and Diversity Elective</td>
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<td>Nursing Issues Course</td>
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<td>NUR 320: Nursing Concepts and Practice III</td>
<td>(4 cr)</td>
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<td>NUR 325: Nursing Concepts and Practice IV</td>
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<td>NUR 418: Introduction to Research</td>
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Semester 7
Nursing Issues Course (1 cr) (Select two) (2 cr)
NUR 415: Nursing Concepts and Practice V (3 cr)
NUR 425: Nursing Concepts and Practice VI (3 cr)
NUR 430: Concepts in Community Health Nursing (4 cr)
SVL 285: Servant Leadership (3 cr)
Total Credits: 15

Semester 8
Nursing Issues Course (1 cr)
NUR 416: Information and Financial Resources in Nursing (3 cr)
NUR 450: Concepts of Nursing Leadership (3 cr)
NUR 460: Advanced Concepts of Nursing Practice (4 cr)
NUR 465: Transition to Nursing Practice (2 cr)
Total Credits: 13

Total Program Course Credits: 120
Course Descriptions

Prerequisites are courses that must be taken prior to the indicated course.

Corequisites are courses that are taken at the same time as the indicated course according to the Curriculum Plan.

Directed Study is designed to fulfill the need to have an existing course that is required by a student’s program 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 College. A student must have completed fifteen credit hours at the College 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 Academic Dean of the school through which credit is to be granted.

Courses with a number below 100 do not count toward academic program requirements but may be counted toward enrollment status – full or part-time – for financial aid purposes. All 095 courses are intended to assist students from diverse backgrounds and levels of academic preparation to succeed in subsequent college course work. A listing of courses that do not offer college credit is shown last in this section.

Special Departmental Courses

Cooperative Education 296 (1-3 cr Contact time is determined by the type of experience outlined.)
This program allows eligible students to have the opportunity to earn college credit while working as employees or volunteers. Application Form must be completed with consultation between the student, the Program Chair, and appropriate Academic Dean and be submitted to the Registrar with appropriate signatures. A student must have completed fifteen credit hours at the College and hold a cumulative GPA of 2.5 or higher. Students must be degree-seeking at Mercy College of Health Sciences. Grading is on a pass/fail basis.

Cooperative Education 496 (1-3 cr Contact time is determined by the type of experience outlined.)
This experience allows eligible students to have the opportunity to earn college credit while working as employees or volunteers. Application Form must be completed with consultation between the student, the Program Chair, and appropriate Academic Dean, and be submitted to the Registrar with appropriate signatures. A student must have completed fifteen credit hours at the College and hold a cumulative GPA of 2.5 or higher. Students must be degree-seeking at Mercy College of Health Sciences. 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 fifteen credit hours at the College, 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 appropriate Academic Dean, and 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 fifteen credit hours at the College, 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 appropriate Academic Dean, and 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 MCHS faculty sponsor to collaborate with them on a research project. Students must have accumulated 90 credit hours, be in good standing with the college and academic program, and have a cumulative GPA of 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 program 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 program 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 program 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.

**ART 120 Art Appreciation (3 cr)**
Tours, guest speakers, and hands-on experiences will accompany in-classroom exploration of the history of art. Emphasis will be on the viewing, understanding, and appreciation of representative artworks.
Mode of delivery: face-to-face. 3 lecture hours.

**BIO 095 Introductory Biology (with Lab) (3 cr)**
This course will expose the student to introductory biology with an emphasis on topics that are particularly related to health sciences. The main focus of this class is to develop problem-solving and critical thinking skills in the biological sciences at levels appropriate to students new to biology and the health sciences. The course will motivate students to learn biology by introducing them to various biology concepts and how these concepts are related to life. The accompanying labs will reinforce lecture through hands-on activities and experimentation. Students will acquire skills in visualizing the macroscopic and microscopic world of the biological and health sciences.
Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory 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. Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours.

**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.

**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 BIO 095, or equivalent.
Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours.

**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. 3 lecture hours, 2 laboratory hours.

**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 BIO 095, or equivalent.
Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours.

**BIO 302 Pathophysiology (3 cr)**
This course presents a study of the etiology, pathogenesis, and manifestations of common conditions and dysfunctions seen in health care. PREREQUISITES: BIO 180, BIO 185 or consent of the instructor.
Mode of delivery: face-to-face. 3 lecture hours.

**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.

**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.

**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.

**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.

**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. PREREQUISITES: BIO 180, 185.
Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours.

**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.

**BHS 300 Practicum I (2 cr)**
This course offers the opportunity to integrate, apply and be exposed to professions in the health care organization. Student, faculty member and preceptor will mutually agree on area of study and practicum setting.
Mode of delivery: web-based. 1 lecture hour, 3 preceptorship hours.

**BHS 400 Practicum II (2 cr)**
This course offers a second opportunity to integrate, apply and be exposed to professions in the health care organization. Student, faculty member and preceptor will mutually agree on area of study and practicum setting. PREREQUISITES: BHS 300. Mode of delivery: web-based. 1 lecture hour, 3 preceptorship hours.
BHS 465 Health Assessment (3 cr)
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 clients 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. PREREQUISITES: BIO 101, 102, 180, 185.
Mode of delivery: face-to-face. 3 lecture hours.

CHE 095 Introductory Chemistry (with Lab) (3 cr)
This course will expose the student to introductory chemistry with an emphasis on topics that are particularly related to health sciences. The main focus of this class is to develop problem-solving and mathematical skills at levels appropriate to students new to chemistry and the health sciences. The course will motivate students to learn chemistry by showing them how to think through a problem and formulate solution strategies. The accompanying labs will reinforce lecture through hands-on experimentation. Students will acquire skills in visualizing the molecular world of health science.
Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours.

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 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.
Mode of delivery: face-to-face; web-based. 3 lecture hours. 2 laboratory hours.

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. PREREQUISITES: CHE 101.
Mode of delivery: face-to-face. 3 lecture hours. 2 laboratory hours.

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.

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.

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.

*Affiliated colleges and universities may make adjustments to the credits awarded for individual CLS courses.

CLS 411 Clinical Immunology Didactic (1 cr*)
Antigen/antibody structure, function and interaction; principles and procedures of humoral and cellular immunology; clinical correlation of serological testing; molecular diagnostics; and quality control.
Mode of delivery: face-to-face. 1 lecture hour.

CLS 412 Clinical Immunohematology Didactic (2 cr*)
Major blood group systems; principles and procedures for antigen/antibody detection and identification; component therapy; transfusion reaction evaluation; Rh immunoglobulin; and quality control.
Mode of delivery: face-to-face. 2 lecture hours.

CLS 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.

CLS 416 Clinical Chemistry Didactic (4 cr*)
Identification and quantification of specific chemical substances in blood and body fluids by analytical methodologies; clinical correlation with disease states; principles of instrumentation; data processing; toxicology; and quality control. Mode of delivery: face-to-face. 4 lecture hours.

CLS 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; CLS careers; infection control; conducting meetings; aspects of laboratory and patient safety; and professional development.
Mode of delivery: face-to-face. 1 lecture hour.

CLS 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. 6 clinical hours.
CLS 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. 6 clinical hours.

CLS 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. 6 clinical hours.

CLS 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. 6 clinical hours.

CLS 442 Clinical Microbiology Didactic I (4 cr*)
Theory and techniques of cultivation, isolation and identification of bacteria and viruses; determination of sensitivity to antimicrobial agents; clinical correlation to disease states, asepsis, epidemiology; and quality control.
Mode of delivery: face-to-face. 4 lecture hours.

CLS 444 Clinical Hematology Didactic I (3 cr*)
Mode of delivery: face-to-face. 3 lecture hours.

CLS 448 Management and Education Methods Didactic II (1 cr*)
Laboratory management/administration and education methodology including: the education process and methodologies; continuing education; resume writing; interview skills; and rotations through five different sites and/or job classes allowing exposure to alternative areas in which clinical laboratory science is practiced.
PREREQUISITE: CLS 418
Mode of delivery: face-to-face. 0.6 lecture hours, 1.2 clinical hours.

CLS 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: CLS 432
Mode of delivery: face-to-face. 6 clinical hours.

CLS 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: CLS 433
Mode of delivery: face-to-face. 6 clinical hours.

CLS 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: CLS 435
Mode of delivery: face-to-face. 6 clinical hours.

**CLS 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: CLS 436
Mode of delivery: face-to-face. 6 clinical hours.

**CLS 472 Clinical Microbiology Didactic II (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: CLS 442.
Mode of delivery: face-to-face. 2 lecture hours.

**CLS 474 Clinical Hematology Didactic II (2 cr*)**
Theory and identification of platelet formation; identification of coagulation factors, hemostasis and disease states; analysis of bone marrow techniques and disorders; principles of instrumentation and techniques which determine major hematologic and coagulation parameters. PREREQUISITE: CLS 444
Mode of delivery: face-to-face. 2 lecture hours.

**CLS 478 Management and Education Methods Didactic 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: CLS 448
Mode of delivery: face-to-face. 3 lecture hours.

**CLS 485 Phlebotomy (1 cr*)**
The performance of venipuncture for the purpose of withdrawing a sample of blood to be analyzed according to the instructions of a physician, aseptic technique, manual skills, interpersonal skills, and quality control.
Mode of delivery: face-to-face. 0.33 clinical hours, 2 clinical hours.

**CMP 120 Computer Informatics (3 cr)**
This course provides an overview of microcomputer applications including a brief introduction to computer concepts, Microsoft Windows, Microsoft Word, Excel, PowerPoint, and Outlook. This course focuses on the use of computer software for information research and management in the educational process. The course includes electronic library searching and use of the Internet for research purposes. This course will also provide opportunity to navigate through a learning management system.
Mode of delivery: face-to-face. 3 lecture hours.

**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 health care team, ethical and legal principles, patient care techniques, OSHA requirements, and universal precaution procedures and regulations. Modern issues in health care are discussed. PREREQUISITES: BIO 180, ENG 101, MED 101, MAT 120, PHY 101. COREQUISITES: DMS 103, DMS 107, DMS 108 and DMS 115 for Cardiovascular or DMS 101, DMS 103, DMS 111, DMS 112 and DMS 116 for Ab/ObGyn.
Mode of delivery: face-to-face. 3 lecture hours.

**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, PHY 101. COREQUISITES: DMS 101, (DMS 107,
DMS 107 Cardiovascular Lab I (1 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, DMS 108 and DMS 115.
Mode of delivery: face-to-face. 2 laboratory hours.

DMS 108 Cardiovascular Clinical I (1 cr)
This course develops basic competence in the identification and manipulation of diagnostic ultrasound equipment. 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, weekly manual check-offs, affective competency evaluations, descriptive clinical logs, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: BIO 180, ENG 101, MED 101, PHI 110, PHY 101. COREQUISITES: DMS 101, DMS 103, DMS 107 and DMS 115.
Mode of delivery: face-to-face. 8 clinical hours.

DMS 111 General Lab I (1 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, DMS 112, DMS 116.
Mode of delivery: face-to-face. 2 laboratory hours.

DMS 112 General Clinical I (1 cr)
This course develops basic competence in the identification and manipulation of diagnostic ultrasound equipment. 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, weekly manual check-offs, affective competency evaluations, descriptive clinical logs, retention tests, clinical competencies, and the final challenge exam. PREREQUISITES: BIO 180, ENG 101, MED 101, PHI 110, PHY 101. COREQUISITES: DMS 101, DMS 103, DMS 111, DMS 116.
Mode of delivery: face-to-face. 8 clinical hours.

DMS 115 Applied Cardiovascular 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, PHY 101. COREQUISITES: DMS 101, DMS 103, DMS 107, DMS 108.
Mode of delivery: face-to-face. 4 lecture hours.

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, and PHY 101. COREQUISITES: DMS 101, DMS 103, DMS 111, and DMS 112.
Mode of delivery: face-to-face. 4 lecture hours.

DMS 117 Applied Cardiovascular 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, DMS 108, and DMS 115. COREQUISITES: DMS 122, DMS 123 and DMS 125, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 3 lecture hours.

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, DMS 112, and DMS 116.

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COREQUISITES: DMS 126, DMS 127 DMS 125, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 3 lecture hours.

**DMS 122 Cardiovascular 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, DMS 108, and DMS 115. COREQUISITES: DMS 117, DMS 123, DMS 125, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 4 laboratory hours.

**DMS 123 Cardiovascular Clinical II (2 cr)**
This clinical rotation introduces patient assessment techniques. In addition, the student will begin performing basic imaging and technical 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 107, DMS 108, and DMS 115.
COREQUISITES: DMS 117, DMS 122, DMS 123, DMS 125, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 16 laboratory hours.

**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, DMS 108 and DMS 115 for Cardiovascular or DMS 111, DMS 112 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.

**DMS 126 General 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 111, DMS 112, and DMS 116. COREQUISITES: DMS 118, DMS 127, DMS 125, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 4 laboratory hours.

**DMS 127 General Clinical II (2 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, DMS 112, and DMS 116.
COREQUISITES: DMS 118, DMS 125, DMS 126, PSY 101, and SPE 105.
Mode of delivery: face-to-face. 16 laboratory hours.

**DMS 134 Cardiovascular 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, PSY 101, and SPE 105. COREQUISITE: DMS 133, DMS 215 BIO 302, and SLP 999.
Mode of delivery: face-to-face. 2 laboratory hours.

**DMS 133 Cardiovascular Clinical III (2 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 105 and DMS 120. Students will demonstrate an increasing degree of competence in the performance of cardiovascular techniques. PREREQUISITES: DMS 117, DMS 122, DMS 123, DMS 125, PSY 101, and SPE 105. COREQUISITE: DMS 134, DMS 215, BIO 302, and SLP 999.

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Mode of delivery: face-to-face. 16 clinical hours.

**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, PSY 101, and SPE 105. **COREQUISITE:** DMS 137, DMS 216, BIO 302, and SLP 999.

Mode of delivery: face-to-face. 2 laboratory hours.

**DMS 137 General Clinical III (2 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, 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, PSY 101, and SPE 105. **COREQUISITE:** DMS 138, DMS 216, BIO 302, and SLP 999.

Mode of delivery: face-to-face. 16 clinical hours.

**DMS 204 Cardiovascular Lab IV (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:** DMS 110, DMS 134, DMS 134, DMS 215, and BIO 302. **COREQUISITE:** DMS 209, DMS 225. Mode of delivery: face-to-face. 2 laboratory hours.

**DMS 209 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 134, DMS 215, and BIO 302. **COREQUISITE:** DMS 209, DMS 225. Mode of delivery: face-to-face. 24 clinical hours.

**DMS 207 General Lab IV (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:** DMS 138, DMS 137, DMS 216, BIO 302. **COREQUISITE:** DMS 211, DMS 226. Mode of delivery: face-to-face. 2 laboratory hours.

**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 302. **COREQUISITE:** DMS 211, DMS 226. Mode of delivery: face-to-face. 24 clinical hours.

**DMS 215 Applied Cardiovascular 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, PSY 101, SPE 105. COREQUISITE: BIO 302, SLP 999, DMS 132, DMS 134.
Mode of delivery: face-to-face. 4 lecture hours.

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, PSY 101, SPE 105. COREQUISITE: SLP 999, BIO 302, DMS 138, and DMS 137.
Mode of delivery: face-to-face. 4 lecture hours.

DMS 225 Applied Cardiovascular IV (3 cr)
This course discusses advanced cardiovascular ultrasound pathologic analysis in areas such as pediatric, transesophageal, stress echocardiography, and vascular technology. Techniques used in a progressive clinical environment will also be covered. In addition, contrast echocardiography and the future of ultrasound is presented. PREREQUISITES: BIO 302, SLP 999, DMS 134, DMS 215. COREQUISITES: DMS 204, DMS 209. Mode of delivery: face-to-face. 3 lecture hours.

DMS 226 Applied General IV (3 cr)
This course discusses advanced Ab/ObGyn ultrasound techniques performed in a progressive clinical environment. PREREQUISITES: BIO 302, SLP 999, DMS 136, DMS 137, DMS 216. COREQUISITES: DMS 207, DMS 211.
Mode of delivery: face-to-face. 3 lecture hours.

DMS 230 Cardiovascular 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 225, DMS 208, DMS 209. COREQUISITES: DMS 233, and PHI 320.
Mode of delivery: face-to-face. 24 clinical hours.

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, DMS 207, and DMS 211. COREQUISITES: DMS 234 and PHI 320.
Mode of delivery: face-to-face. 24 clinical hours.

DMS 233 Cardiovascular Seminar (2 cr)
This course provides a comprehensive review prior to the ARDMS National Registry Examinations. PREREQUISITES: DMS 225, DMS 204, DMS 209. COREQUISITES: DMS 230 and PHI 320. Mode of delivery: face-to-face. 2 lecture hours.

DMS 234 General Seminar (2 cr)
This course provides a comprehensive review prior to the ARDMS National Registry Examinations. PREREQUISITES: DMS 226, DMS 207, DMS 211. COREQUISITES: DMS 231 and PHI 320. Mode of delivery: face-to-face. 2 lecture hours.

ECN 202 Economics (3 cr)
This course is a survey analysis of micro and macro economics. An analysis of the fundamental concepts and principles of production, price, distribution, money, and banking is included.
Mode of delivery: face-to-face. 3 lecture hours.

EDU 301 Educational Methodologies (3 cr)
The student will learn how to develop a curriculum framework appropriate to the course content, instructional methodologies and techniques; how to establish learning environments, theories of classroom management; how to develop and evaluate subject matter; how to create a teaching plan; how to develop a teaching style and philosophy;

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and how to evaluate student learning.
Mode of delivery: face-to-face. 3 lecture hours.

**EDU 350 Education Psychology (3 cr)**
This course examines research, theory, and practice relevant to theories of intelligence, teaching and learning; cognitive, social, physical, and emotional development across the life span; and understanding human behavior.
Mode of delivery: face-to-face. 3 lecture hours.

**EDU 410 Curriculum Development (3 cr)**
This is the study of the basic principles and procedures needed in the development of curricula. It includes basic principles and skills for effective planning, instruction, and classroom management. Included are learning theories applicable to curriculum construction with emphasis on mechanisms to integrate didactic and clinical education components in the allied health professions.
Mode of delivery: face-to-face. 3 lecture hours.

**EDU 430 Staff and Professional Development (3 cr)**
This course explores professional and staff development within an organization. It includes the following: understanding learning cultures with an organization, assessing professional and staff development needs, developing a professional and staff development programs, and developing teaching and learning programs as a function of patient education.
Mode of delivery: face-to-face. 3 lecture hours.

**EDU 440 Public Health Advocacy (3 cr)**
This course is an overview of public health issues related to health care. The course includes an overview of the following health care related issues: ethics, constitutional considerations, access to health care, end of life, reproductive health; fraud and abuse, government regulation, confidentiality, and ethical decision making.
Mode of delivery: face-to-face. 3 lecture hours.

**EDU 480 Essentials of Preceptorship (3 cr)**
This course will provide allied health professionals with the tools to become effective preceptors in their clinical settings. Emphasis is placed on enhancing skills of the preceptor by including development of preceptee instruction in critical thinking skills, strategies for dealing with conflict, essential steps to evaluate performance and providing feedback to the preceptee. PRE-REQUISITES: To be in the last semester, or have completed the clinical component of an accredited health care related program, completion of a health care related Associates degree, or with the Dean of Liberal Arts and Sciences approval.
Mode of delivery: web-based. 3 lecture hours.

**EM 109 Emergency Medical Technician (6 cr)**
This course is intended to prepare a medically competent 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 college academic credit should register for EM0109.
Mode of delivery: face-to-face. 4 lecture hours, 4 laboratory hours, and 3 clinical hours.

**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 a 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 NREMT 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: face-to-face. 4 lecture hours, 2 laboratory hours.

**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 EMT Basic/EMT Certification, COREQUISITES: EMS 111, EMS 112, EMS 113, EMS 114.
Mode of delivery: face-to-face. 4 lecture hours.

**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.

**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.

**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. 4 clinical hours.

**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.

**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. PREREQUISITE: 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.

**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. PREREQUISITE: 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.

**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. PREREQUISITE: 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.
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. PREREQUISITE: 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.

EMS 134 EMS Field Practicum II (2 cr)
This course offers the student actual patient practice in the pre-hospital arena. Students in this course function as an “extra” EMS Team member on EMS calls. Students enrolled in this course will perform patient assessments, 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 covered in this course. Mode of delivery: face-to-face. 6 field hours.

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. PREREQUISITE: EMS 130, EMS 131, EMS 132, and EMS 133; COREQUISITES: EMS 161, EMS 162, and EMS 163.
Mode of delivery: face-to-face. 3 lecture hours.

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. PREREQUISITE: 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.

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 Program are included as components of this course. PREREQUISITE: 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.

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. PREREQUISITE: EMS 130, EMS 131, EMS 132, and EMS 133; COREQUISITES: EMS 160, EMS 161, and EMS 162.
Mode of delivery: face-to-face. 6 clinical hours.

EMS 164 Field Practicum III (2 cr)
Students enrolled in this course will function as an EMS Team leader. Under the supervision of an approved preceptor, students will 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. 6 field practicum hours.
ENG 095 College Preparatory Writing (3 cr)
This course introduces students to writing at the basic sentence and paragraph levels including the use of appropriate grammar, syntax, punctuation, spelling and editing techniques. Students will learn how to properly construct a paper, practice writing essays and become basically proficient in elementary APA formatting in preparation for Composition I.
Mode of delivery: face-to-face. 3 lecture hours.

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. 3 lecture hours.

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 college 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, or web-based. 3 lecture hours.

ENG 335 Literature and Medicine (3 cr)
This course approaches ethical, social, and psychological issues in health care 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.

ESL 095 ESL Communications and College Preparatory Course (3 cr)
This course introduces students who have English as a second language (ESL/ELL) to healthcare communication, study skills, and test taking strategies that will help them throughout their college careers. Students will learn the essentials of healthcare communication as it relates to patients and co-workers and also learn the basic skills necessary to be successful at the college level.
Mode of delivery: face-to-face. 3 lecture hours.

HCA 301 Health Care 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 health care delivery at the federal, state, and local level. Topics include health care costs, accessibility of services, governmental influence on health care delivery, private industry role in health care, services for the medically indigent and elderly, ethical issues regarding transplants, reproductive technology, end of life decisions, and funding. Mode of delivery: web-based. 3 lecture hours.

HCA 303 Health Care Economics (3 cr)
This course explores some of the major issues facing the health care industry and the effect that public policy and business environment has on a health care 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: face-to-face, or web-based. 3 lecture hours.

HCA 304 Human Resources Management in Health Care (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.

**HCA 305 Principles of Management and Leadership in Health Care (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. This course requires two hours didactic and one hour clinical. CROSS LISTED: MGT 305.
Mode of delivery: web-based. 3 lecture hours.

**HCA 320 Marketing Strategies in Health Care (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.

**HCA 324 Information Resources in Health Care (3 cr)**
This course explores the opportunities and challenges inherent in the use of health care 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.

**HCA 404 Legal/Ethical Aspects of Health Care (3 cr)**
This course examines the contemporary application of legal and ethical issues involved in the management and delivery of health care 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 health care. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration.
CROSS LISTED: MGT 404. Mode of delivery: web-based. 3 lecture hours.

**HCA 410 Special Topics in Health Care (3 cr)**
This course consists of seminars, lectures, round table discussions and panel discussions reflecting contemporary issues and trends in the health care industry. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration.
Mode of delivery: web-based. 3 lecture hours.

**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. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration.
Mode of delivery: face-to-face. 3 lecture hours.

**HCA 413 Hospitals: Organization and Administration (3 cr)**
This course focuses on a variety of topics that are pertinent to the delivery of health care 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. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration.
Mode of delivery: web-based. 3 lecture hours.

**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. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration.
Mode of delivery: web-based. 3 lecture hours.

**HCA 415 Health Care Financial Management (3 cr)**
This course explores the organizational and operational aspects of fiscal analysis and internal control of health care 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. PREREQUISITES: 15 credit hours of HCA courses or approval of chair of Health Care Administration. CROSS LISTED: MGT 415.

Mode of delivery: web-based. 3 lecture hours.

**HCA 420 Practicum I (3 cr)**
This course offers the opportunity to integrate and apply previously learned health management knowledge and skills. The student will become part of a health care organization, working closely with professional managers. Student, faculty member and preceptor will mutually agree on management area of study and practicum setting. PREREQUISITES: 15 credit hours of HCA courses or approval of chair of Health Care Administration.

Mode of delivery: web-based. 1 lecture hour, 6 practicum hours.

**HCA 421 Practicum II (3 cr)**
This course offers the opportunity to integrate and apply previously learned health management knowledge and skills in an area other than what was done in HCA 420. The student will become part of a health care organization, working closely with professional managers. Student, faculty member and preceptor will mutually agree on management area of study and practicum setting. PREREQUISITES: HCA 420.

Mode of delivery: web-based. 1 lecture hour, 6 practicum hours.

**HIS 236 History of the Modern World (3 cr)**
This course offers a survey of Western history from 1600 to the present, concentrating on economic, political, scientific, and intellectual influences during this period.

Mode of delivery: face-to-face, or web-based. 3 lecture hours.

**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, or web-based. 3 lecture hours.

**LRT 101 Diagnostic Procedures I (2 cr)**
Limited Radiographers need a solid foundation of knowledge, skills, and attitudes in order to accurately position patients to produce quality diagnostic images. This course provides exposure to a non-energized skills laboratory. Through intensive class and laboratory sessions, students will learn and practice radiographic positioning procedures for the chest and extremities. In addition, students will explore pathological conditions and how they affect radiographic images; compare and contrast imaging procedures for the pediatric, adult, and geriatric patient; and be introduced to a five-step method for critiquing radiographs for diagnostic quality. PREREQUISITES: MA 106, LRT 110. COREQUISITES: MA 122.

Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours.

**LRT 102 Diagnostic Procedures II (2 cr)**
This course returns to scientific roots to discuss radiation biology and safety. Students will learn best practices in the x-ray room to keep themselves, patients, and co-workers protected from ionizing radiation-ALARA. They will be introduced to and practice approaches to pediatric and geriatric radiography. Students will have the opportunity to put their understanding of image quality into practice utilizing in classroom evaluation of patient images. This course concludes with a thorough discussion of Iowa scope of practice for limited X-ray machine operators, permit and continuing education requirements. PREREQUISITES: LRT 101. COREQUISITES: LRT 120.

Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours.

**LRT 110 Fundamentals of Limited Radiography (2 cr)**
The purpose of this course is to provide students with a scientific understanding of x-rays. Students will be exposed to historical perspective as it relates to discovery and development of x-ray based diagnostics. Through in depth discussions and class activities, students will gain an understanding of electromagnetic spectrum, properties and production of x-rays, exposure factors, and image formation. Principles in this course will give students the knowledge they need to produce film based and computed radiographic images. Students will transition to the study of scope of practice and patient care. COREQUISITES: MA 102.

Mode of delivery: face-to-face. 2 lecture hours.
LRT 120 Clinical Practicum (1 cr)
This course provides clinical experiences for the completion of required competencies. Medical Assisting Clinical Coordinator will arrange clinical sites on an individual basis with each student. This course with perquisites meets the requirement for students to take the State of Iowa exam to become a "Limited Diagnostic Radiographer" in the areas of chest and extremities. PREREQUISITES: LRT 101, LRT 110.
COREQUISITES: LRT 102, MA 201, MA 202.
Mode of delivery: face-to-face. 3 clinical practicum hours.

MA 101 Medical Assistant Administrative Procedures I (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. A medical terminology overview by emphasizes prefixes, suffixes, and root words stressing spelling and pronunciation. Students will explore and demonstrate computer literacy with computer application of Microsoft Word, Excel, PowerPoint and Outlook. Library resources, APA format, and plagiarism will be applied as students produce work products utilizing critical thinking. Learning styles, time and stress management as well as test taking strategies are introduced.
Mode of delivery: face-to-face. 4 lecture hours.

MA 102 Medical Assistant 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, special senses and comprehensive exams. Students will develop and deliver a patient education project. COREQUISITES: LRT 110.
Mode of delivery: face-to-face. 2 lecture hours, 4 clinical hours.

MA 106 Anatomy and Physiology (with Lab) (4 cr)
This course offers basic concepts in human anatomical structure and physiology with relation to body functions. It includes all major body systems in regards to gross anatomy and function as it relates to homeostasis. The laboratory component emphasizes lecture topics and includes further exploration of tissues and organs through hands on work.
Mode of delivery: face-to-face. 3 lecture hours, 2 laboratory hours.

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 prevention of common and well-known illnesses. The content also includes the immune and genetic relationships as well as pain management. Alternative and complementary health care is introduced. Students will produce pathology reports and review current research.
PREREQUISITES: MA 106. Mode of delivery: face-to-face. 3 lecture hours.

MA 121 Medical Assistant Administrative Procedures II (4 cr)
This course focuses on medical insurance billing, diagnostic and procedural coding. Medicolegal issues are discussed as well as insurance fraud, abuse and medical etiquette. Legal and ethical issues as well as emergency preparedness and first aid are covered. PREREQUISITES: MA 101.
Mode of delivery: face-to-face. 4 lecture hours.

MA 122 Medical Assistant Clinical Procedures II (5 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. PREREQUISITES: MA 106, MA 102. COREQUISITES: LRT 101.
Mode of delivery: face-to-face. 3 lecture hours. 4 laboratory hours.

MA 201 Medical Assistant Professional Components (2 cr)
This course focuses on personal attributes, job readiness, workplace dynamics, human resources, risk management, and emphasizes 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 health
care team are discussed. It provides an opportunity for students to discuss situations that arise in the practicum experience. PREREQUISITES: MA 121, MA 122. COREQUISITES: LRT 120, MA 202.
Mode of delivery: face-to-face. 2 lecture hours.

MA 202 Medical Assistant Practicum (6 cr)
This course expands knowledge and skills and incorporates previously presented information in the program to prepare the student for transition into practice as a Medical Assistant. The student receives supervised experience in an ambulatory health care setting. PREREQUISITES: LRT 101, MA 121, MA 122. COREQUISITES: LRT 120, MA 201. Mode of delivery: face-to-face. 18 practicum hours.

MAT 095 Pre-Algebra (3 cr)
This course is designed as a preparation course of math concepts for health care professionals. Topics to be covered include, but not limited to, working with whole numbers and their negatives; English and metric conversions; fractions, decimals, and percentages; proportions and probability; solving equations and applications; order of operations; and interpretation of graphs and charts.
Mode of delivery: face-to-face. 3 lecture hours.

MAT 102 Math for General Studies (3 cr)
This is a course in the general uses 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. 3 lecture hours of web-based.

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.

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.

MGT 303 Health Care Economics (3 cr)
This course explores some of the major issues facing the health care industry and the effect that public policy and business environment has on a health care 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: HCA 303.
Mode of delivery: face-to-face, web-based. 3 lecture hours.

MGT 304 Human Resources Management (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: HCA 304.
Mode of delivery: web-based. 3 lecture hours.

MGT 305 Principles of Management (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. This course requires two hours didactic and one hour clinical. CROSS LISTED: HCA 305.
Mode of delivery: web-based. 3 lecture hours.

Course Descriptions
MGT 324 Information Resources in Health Care (3 cr)
This course explores the opportunities and challenges inherent in the use of health care management information systems in clinical and non-clinical applications. Subsystems include pathology, nursing, clinical laboratory, radiology, physiology, clinics, education, and financial management. CROSS LISTED: HCA 324.
Mode of delivery: web-based. 3 lecture hours.

MGT 404 Legal/Ethical Aspects of Health Care (3 cr)
This course examines the contemporary application of legal and ethical issues involved in the management and delivery of health care 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 health care. PREREQUISITES: 15 credit hours of HCA courses or approval of Chair of Health Care Administration. CROSS LISTED: HCA 404. Mode of delivery: web-based. 3 lecture hours.

MGT 415 Financial Management (3 cr)
This course explores the organizational and operational aspects of fiscal analysis and internal control of health care 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. PREREQUISITES: 15 credit hours of HCA courses or approval of chair of Health Care Administration. CROSS LISTED: HCA 415.
Mode of delivery: web-based. 3 lecture hours.

MKT 320 Marketing Strategies (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. CROSS LISTED: HCA 320.
Mode of delivery: web-based. 3 lecture hours.

MUS 120 Music Appreciation (3 cr)
This course is an introduction to musical forms, styles, and structures focusing on perceptive listening to masterpieces from selected historical periods and musical genres.
Mode of delivery: face-to-face, web-based. 3 lecture hours.

NMT 401 Nuclear Medicine Foundations (3 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 health care team, radiation protection procedures, appropriate medical terminology; pathology, patient care techniques, and methods for protecting self, patient, and public from ionizing radiation. Instructor and clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to assess student’s application of theory to practice. COREQUISITES: NMT 410, NMT 415, NMT 420.
Mode of delivery: face-to-face. 3 lecture hours.

NMT 410 Nuclear Medicine Physics (2 cr)
This course explores the laws and theories of nuclear physics and instrumentation as it relates to nuclear medicine. Students will explore such topics as modes of radioactive decay, radiation detectors, and the production of radionuclides. This course will provide students with a deeper understanding of how the scans are produced and how radionuclides are created. Instructor and clinical staff evaluations of student cognitive, psychomotor, and technical skills during clinical rotations are used to assess student’s application of theory to practice. COREQUISITES: NMT 401, NMT 415, NMT 420. Mode of delivery: face-to-face. 2 lecture hours.
NMT 415 Nuclear Medicine Imaging I (3 cr)
This course is the student’s first in-depth look at the field of nuclear medicine. Students will begin to learn nuclear medicine procedures, what they are used for, how they are performed, and relevant anatomy and physiology. Students will also learn radionuclide chemistry and radiopharmacy in an effort to understand the principles of making the radiopharmaceuticals required for each procedure. These skills will be learned in the classroom (with the use of classroom visual aids and models) and will be applied in the clinical setting. Instructor and clinical staff evaluations of student cognitive, psychomotor, and technical skills during clinical rotations are used to assess student’s application of theory to practice. COREQUISITES: NMT 401, NMT 410, NMT 420.
Mode of delivery: face-to-face. 3 lecture hours.

NMT 420 Clinical I (5 cr)
Based on the experiences in the classroom, students will have their first opportunity to utilize these skills in the clinical setting. This practicum is designed to allow students to develop a basic competency in the manipulation of nuclear medicine equipment. Students will also be performing basic nuclear medicine procedures and observing more advanced exams and procedures. Clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to assess student’s application of theory to practice. COREQUISITES: NMT 401, NMT 410, NMT 415. Mode of delivery: face-to-face. 16 clinical hours.

NMT 441 Nuclear Medicine Principles (2 cr)
This class prepares students for the high technological demands of a career in nuclear medicine. Students will explore such topics as computer systems in nuclear medicine and their applications, SPECT/PET imaging, and the statistical applications required in nuclear medicine. After the completion of this course, students will have skills and knowledge to apply the appropriate quality control measures to produce high quality diagnostic images. Instructor and clinical staff evaluations of student cognitive, psychomotor, and technical skills during clinical rotations are used to assess student’s application of theory to practice. PREREQUISITES: NMT 401, NMT 410, NMT 415, NMT 420. COREQUISITES: NMT 445, NMT 450.
Mode of delivery: face-to-face. 2 lecture hours.

NMT 445 Nuclear Medicine Imaging II (3 cr)
Based on the belief that all persons have the right to warm, personal, and quality care, this course continues to build on the knowledge acquired in NMT 401 and NMT 415. Students will learn radiobiology and utilize the concepts of ALARA, time, distance, and shielding to better protect themselves and others from radiation. In addition, students will further develop their knowledge of nuclear medicine procedures and explore the topic of medical ethics and how it relates to quality patient care. Instructor and clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to assess student’s application of theory to practice. PREREQUISITES: NMT 401, NMT 410, NMT 415, NMT 420. COREQUISITES: NMT 441, NMT 450.
Mode of delivery: face-to-face. 3 lecture hours.

NMT 450 Clinical II (11 cr)
This practicum is the student’s second clinical opportunity to apply knowledge acquired in their didactic courses. Students will begin performing procedures with more autonomy and competency. Students will build upon the skills, knowledge, and attitudes developed in the previous clinical practicum. Students begin to complete the required clinical competencies that will allow them to succeed on the national certification exams and within the field. Clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to assess student’s application of theory to practice. PREREQUISITES: NMT 401, NMT 410, NMT 415, NMT 420. COREQUISITES: NMT 441, NMT 445.
Mode of delivery: face-to-face. 32 clinical hours.

NMT 470 Advanced Clinical (12 cr)
The course is designed to create a smoother transition for the students into the working world of nuclear medicine. Students will be fine-tuning their skills in preparation for graduation. Opportunities to take on-call rotations with a staff technologist are offered. In addition to clinical work, students will complete “mock” board exams as a final test of their preparation for the national certification exams. Clinical staff evaluations of student cognitive, psychomotor, and affective skills during clinical rotations are used to assess student’s application of theory to practice. PREREQUISITES: NMT 441, NMT 445, NMT 450.
Mode of delivery: face-to-face. 40 clinical hours.
NSG 101 Introduction to Professional Nursing Concepts (5 cr)
This course includes an introduction to the foundation of nursing practice, and is fundamental to advancing nursing education and skills. PREREQUISITE: BIO 180; COREQUISITE: NSG 102.
Mode of delivery: face-to-face. 4 lecture hours, 3 clinical hours.

NSG 102 Professional Nursing Skills I (1 cr)
This course introduces clinical skills as a foundation of nursing practice. It focuses on concepts and clinical skills basic to the practice of nursing across the life span. COREQUISITE: NSG 101.
Mode of delivery: face-to-face. 3 laboratory hours.

NSG 131 Nursing Health Promotion Across the Life Span (5 cr)
This course provides a foundation for health promotion. The focus is health and wellness across the life span with emphasis on well elderly, well pediatric, and maternity nursing. PREREQUISITES: BIO 185, NSG 101, NSG 102, PSY 101, ENG 101; COREQUISITES: NSG 132.
Mode of delivery: face-to-face. 4 lecture hours, 3 clinical hours.

NSG 132 Professional Nursing Skills II (1 cr)
This course builds upon concepts and clinical skills related to the practice of nursing across the life span introduced in Nursing Skills I. PREREQUISITES: BIO 185, NSG 101, NSG 102, PSY 101, ENG 101; COREQUISITE: NSG 131. Mode of delivery: face-to-face. 3 laboratory hours.

NSG 160 Nursing Care of Patients Across the Life Span I (6 cr)
This course focuses on nursing care across the life span, including adult medical-surgical and pediatric content. PREREQUISITES: BIO 302, NSG 131, NSG 132, PSY 202, SOC 102.
Mode of delivery: face-to-face. 3.87 lecture hours, 6.39 clinical hours.

NSG 200 Nursing Care of Patients Across the Life Span II (6 cr)
This course is a continuation of NSG 160 focusing on nursing care across the life span, including adult medical-surgical, pediatric and mental health content. PREREQUISITES: PHA 202, NSG 160.
Mode of delivery: face-to-face. 3.5 lecture hours, 7.5 clinical hours.

NSG 230 Nursing Care of Patients Across the Life Span III (6 cr)
This course focuses on the role of the nurse in managing care of patients across the life span with high acuity problems. PREREQUISITES: NSG 200, NSG 280, BIO 203.
Mode of delivery: face-to-face. 2.5 lecture hours, 10.5 clinical hours.

NSG 231 Role Transition to Professional Practice (6 cr)
This course focuses on the role of the nurse leader and manager of patient care across the life span and on preparation for the Registered Nurse licensure exam (NCLEX-RN). PREREQUISITES: BIO 203, NSG 200, NSG 280. Mode of delivery: face-to-face. 2 lecture hours, 12 clinical hours.

NSG 280 Caring in a Diverse Health Care 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 health care profession. It examines dimensions of self-care to enhance preparation for a career in a health care 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. Applications for culturally sensitive care giving for diverse patients include an examination of religious beliefs and cultural health traditions, and the impact of diversity in the health care workplace. PREREQUISITES: Two semesters of professional program courses with three semesters recommended; CROSS LISTED: PHI 280.
Mode of delivery: face-to-face, web-assisted, or web-based. 3 lecture hours.
NSG 330 through NSG 338 (3 cr)
This three credit hour requirement offers an opportunity to investigate a variety of current issues and trends affecting health care, its delivery system, and the profession of nursing. Students will choose three one-credit seminars during the semester. NSG 300 must be taken as a three-credit course from these options: NSG 330, NSG 331, NSG 332, NSG 334, NSG 335, NSG 336, and NSG 338. PREREQUISITES: NSG 101, NSG 102, or BSN status; non-nursing students are eligible to enroll if they have completed the first semester of their program.
Mode of delivery: web-based. 1 lecture hour.

NSG 330/NUR 330 Pain/Palliative Care/End of Life Care (1 cr)
This course explores best practices in pain management and applies principles of pain management across the life span in case study discussion. An overview of palliative care and end-of-life concepts and programs will be emphasized including acute, community, and hospice care settings.
Mode of delivery: web-based. 1 lecture hour.

NSG 331/NUR 331 Social Injustice/Global Health (1 cr)
This course includes social injustice issues related to healthcare around the world. Discussion will be related to healthcare access, poverty related to healthcare, and human rights. Social injustice increases the prevalence of risk factors, which leads to health inequities. It will look at promoting access to justice, especially for the most vulnerable individuals and groups in society.
Mode of delivery: web-based. 1 lecture hour.

NSG 332/NUR 332 Gerontology (1 cr)
This course includes content specific to the dynamics of aging, theories of aging and nursing interventions for health promotion and improvement of quality of life for older adults. Social, emotional, spiritual, and physical aspects of aging will be explored.
Mode of delivery: web-based. 1 lecture hour.

NSG 334/NUR 334 Genomics (1 cr)
Genomics is an emerging field that assesses the impact of genes and their interaction with behavior, diet, and the environment on population health. This course will review the basics of genetics, including the importance of family history, ethical concerns, the nurse’s role, and the impact on future nursing practice.
Mode of delivery: web-based. 1 lecture hour.

NSG 335/NUR 335 Political Activism (1 cr)
This course is designed to raise students’ awareness and involvement in legislative issues and trends affecting health care, its delivery system, and the profession of nursing. The role of the professional nurse in political advocacy for clients and vulnerable population groups across the life span, as well as the individual nurse’s participation in professional organizations will be explored.
Mode of delivery: web-based. 1 lecture hour.

NSG 336/NUR 336 Spirituality (1 cr)
This course will include an overview of spiritual assessment and direct spiritual care for patients across the lifespan including spiritual development and distress. Students will explore their own issues in spirituality and faith through a spiritual retreat. Student will analyze the relationship between suffering, hope, and faith and the impact of spiritual care interventions to promote healing for patients. Nursing caregivers will explore the sacred dimensions of their caregiving and will discuss methods to support a healing culture for patients and caregivers in clinical work settings.
Mode of delivery: web-based. 1 lecture hour.

NSG 338/NUR 338 Neuroscience Trends (1 cr)
The course is designed to raise students’ awareness of current trends in neuroscience nursing care across the life span. It will review current best practices for neurological and neurosurgical patient care through discussion and evaluation of recent journal articles and national care standards.
Mode of delivery: web-based. 1 lecture hour.

NSG 411 RN to BSN Professional Role I (3 cr)
This course presents the history of professional nursing, and RN to BSN roles and theories. The core values of Mercy are introduced and students reflect on how these values impact their own practice through development of a professional philosophy. Must be taken first semester of RN to BSN curriculum; other RN to BSN core courses may be taken with NSG 411 in the first semester of the RN to BSN curriculum.
Mode of delivery: web-based. 1 lecture hour.
NSG 412 Health Assessment in Nursing (4 cr)
This course presents a systematic, holistic approach to in-depth health history taking and physical examination of clients of all ages. Assessment skills are honed through individual practice guided by online videos and online feedback. PREREQUISITES: NSG 101, NSG 102, NSG 131, NSG 132, NSG 411 (may be taken with NSG 412).
Mode of delivery: web-based. 4 lecture hours.

NSG 416/NUR 416 Information and Financial Management in Nursing (3 cr)
This course will introduce the use of informatics in nursing and financial management as it relates to nursing practice. Nursing informatics encompasses computerized technology, information systems, and nursing science to support the exchange of information needed in health care. Basic financial management concepts will be applied to nursing practice. PREREQUISITES: MAT 100, BIO 180; NUR 210 and NUR 215 for students in the BSN program.
Mode of delivery: web-based. 3 lecture hours.

NSG 418/NUR 418 Introduction to Research (3 cr)
This course introduces students to research as the foundation for evidence-based practice. PREREQUISITES: STA 330; NUR 220 if in BSN program.
Mode of delivery: web-based. 3 lecture hours.

NSG 423 Principles of Teaching/Learning (3 cr)
This course explores selected theories of teaching/learning and health care literacy in relation to patient/family education in health care and community settings. PREREQUISITE: NSG 411 (may be taken with NSG 423).
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. It will focus on population health and the determinants that affect health outcomes within aggregate groups. It provides the unique opportunity to fulfill the 45-hour clinical practicum requirement through domestic or international immersion experiences. Options include unmatched access to Native American healing rituals on the Pine Ridge Reservation, discovering indigenous medical treatments of the Mayan and Latino populations in the Yucatan, providing nursing care at a youth diabetic camp, or immersing in local, diverse populations. Students living within a two hour radius of Des Moines and not participating in an immersion experience will complete the hours with an assigned preceptor in Des Moines. Distant students will work with the instructor to arrange and complete their practicum experiences in their own community. In addition to working with a member of Mercy College nursing faculty during the practicum, the student’s hands-on experience is monitored by a local preceptor. PREREQUISITES: NSG 230, NSG 231, NSG 411, NSG 412.
Mode of delivery: web-based, 3 lecture hours, 3 clinical hours.

NSG 483 Theories of Leadership and Management in Nursing (3 cr)
This course presents theories of leadership management and change processes. Skills necessary to facilitate group dynamics and personnel management are addressed, and a variety of quality control models are examined. PREREQUISITES: NSG 230, NSG 231, NSG 411 (may be taken with NSG 483).
Mode of delivery: web-based. 3 lecture hours.

NSG 485 RN to BSN Professional Role II (3 cr)
This course provides an opportunity for students to engage with peers, colleagues and faculty to synthesize and expand knowledge related to professional development in the nursing profession. Must be taken in the last semester of the RN to 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 health care professionals will also be explored.
Mode of delivery: face-to-face, web-based. 3 lecture hours.

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: Completion of two semesters of program courses or with approval of course instructor.
Mode of delivery: face-to-face, web-based. 3 lecture hours.
NUR 180 Philosophy and Theory of Nursing I (1 cr)
This course will delve into the historical and 20th century influences on modern nursing practice. Students will explore how Nightingale’s practice and observations changed healthcare. Mode of delivery: face-to-face, web-assisted. 1 lecture hour.

NUR 210 Nursing Foundations I (4 cr)
This course is the first of two courses which explore foundational concepts essential to nursing practice. Concepts introduce students to the fundamentals of caring for patients across the life span and in all settings where nurses care for patients. PREREQUISITES: MAT 100, PSY 101, ENG 101, BIO 180, BIO 185, BIO 203; COREQUISITE: NUR 215. Mode of delivery: face-to-face. 4 lecture hours.

NUR 215 Nursing Competency I (1 cr)
This course introduces clinical skills as a foundation of nursing practice. It focuses on concepts and clinical skills basic to the practice of nursing across the life span. Students are introduced to the holistic care of clients, beginning clinical decision-making, and foundational therapeutic nursing interventions. PREREQUISITES: MAT 100, PSY 101, ENG 101, BIO 180, BIO 185, BIO 203; COREQUISITE: NUR 210. Mode of delivery: face-to-face. 2 lab hours.

NUR 220 Nursing Foundations II (4 cr)
This course is the second of two courses which explore fundamental concepts essential to nursing practice. Concepts introduce students to the fundamentals of caring for patients across the life span and in all setting where nurses care for patients. PREREQUISITES: BIO 302, SOC 102, PSY 202, PHA 202, NUR 210, NUR 215, NUR 260; COREQUISITES: NUR 225, NUR 275. Mode of delivery: face-to-face. 4 lecture hours.

NUR 225 Nursing Competency II (2 cr)
This course builds on concepts and clinical skills related to the practice of nursing introduced in the Nursing Competency I, Nursing Foundations I, and Nursing Foundations II courses. Intermediate and advance clinical skills will be introduced. PREREQUISITES: BIO 302, SOC 102, PSY 202, PHA 202, NUR 210, NUR 215, NUR 260; COREQUISITES: NUR 220, NUR 275. Mode of delivery: face-to-face. 4 lab hours.

NUR 260 Philosophy and Theory of Nursing II (3 cr)
This course focuses on the developments of nursing history and the substantive knowledge for practice and recognition of nursing as a discipline and a profession. PREREQUISITE: NUR 180; COREQUISITES: NUR 210, NUR 215. Mode of delivery: face-to-face, web-assisted. 3 lecture hours.

NUR 275 Holistic Assessment in Nursing (4 cr)
This course presents a systematic, holistic approach to in-depth health history taking and physical examination of clients of all ages. Physical assessment skills are developed through guided application in the classroom and lab settings. PREREQUISITES: BIO 302, PHA 202, PSY 202, SOC 102, NUR 210, NUR 215; COREQUISITES: NUR 220, NUR 225. Mode of delivery: face-to-face. 3 lecture hours, 2 lab hours.

NUR 310 Nursing Concepts and Practice I (4 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: PHA 202, SPE 105, ENG 102, NUR 220, NUR 225, NUR 275; COREQUISITE: NUR 315. Mode of delivery: face-to-face. 3 lecture hours, 3 clinical hours.

NUR 315 Nursing Concepts and Practice II (3 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: PHA 202, SPE 105, ENG 102, NUR 220, NUR 225, NUR 275; COREQUISITE: NUR 310 Mode of delivery: face-to-face. 2.5 lecture hours, 1.5 clinical hours.
NUR 320 Nursing Concepts and Practice III (4 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: NTR 300, NUR 310, NUR 315, NUR 370; COREQUISITE: NUR 325. Mode of delivery: face-to-face. 3 lecture hours, 3 clinical hours.

NUR 325 Nursing Concepts and Practice IV (3 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: NTR 300, NUR 310, NUR 315, NUR 370; COREQUISITE: NUR 320. Mode of delivery: face-to-face. 2.5 lecture hours, 1.5 clinical hours.

NUR 370 Concepts of Teaching/Learning (3 cr)
This course explores concepts of teaching/learning and health care literacy in relation to patient/family education in health care and community settings. PREREQUISITES: NUR 220, NUR 225. Mode of delivery: face-to-face, web-assisted. 3 lecture hours.

NUR 415 Nursing Concepts and Practice V (3 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: NUR 320, NUR 325; COREQUISITES: NUR 425, NUR 430. Mode of delivery: face-to-face. 2.5 lecture hours, 1.5 clinical hours.

NUR 425 Nursing Concepts and Practice VI (3 cr)
This course prepares students to care for patients across the life span in various settings. Concepts are explored through exemplars and build from simple to complex through the semester. Concepts will be applied in both the classroom and clinical settings. PREREQUISITES: NUR 320, NUR 325; COREQUISITES: NUR 415, NUR 430. Mode of delivery: face-to-face. 2.5 lecture hours, 1.5 clinical hours.

NUR 430 Concepts of Community Health Nursing (4 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. This course provides the unique opportunity to fulfill the 45-hour clinical practicum requirements through domestic or international immersion experiences. Options include unmatched access to Native American healing rituals on the Pine Ridge Reservation, discovering indigenous medical treatments of the Mayan and Latino populations in the Yucatan, providing nursing care at a youth diabetic camp or immersing in local, diverse populations. In addition to working with a member of the Mercy College nursing faculty during the practicum, the student has hands-on experience in collaboration with a local preceptor. PREREQUISITES: NUR 320, NUR 325, NUR 275; COREQUISITES: NUR 415, NUR 425. Mode of delivery: face-to-face. 3 lecture hours, 3 clinical hours.

NUR 450 Concepts of Nursing Leadership (3 cr)
This course focuses on the role of the nurse leader and manager of patient care across the life span and in all settings where nurses care for patients. A capstone seminar includes preparation for the NCLEX-RN licensure exam and entry to practice. PREREQUISITES: NUR 415, NUR 425; COREQUISITES: NUR 460, NUR 465. Mode of delivery: face-to-face. 3 lecture hours.

NUR 460 Advanced Concepts of Nursing Practice (4 cr)
This course synthesizes concepts learned in previous semesters. Students explore complex health problems with multi-system involvement. PREREQUISITES: NUR 415, NUR 425; COREQUISITES: NUR 450, NUR 465. Mode of delivery: face-to-face. 3 lecture hours.

NUR 465 Transition to Clinical Practice (2 cr)
This course consists of a 90-hour preceptored clinical practicum in which students work directly with an experienced Registered Nurse. PREREQUISITES: NUR 415, NUR 425; COREQUISITES: NUR 450, NUR 460. Mode of delivery: face-to-face. 6 clinical hours.

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. 3 lecture hours.

**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 health care 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 health care contexts.

Mode of delivery: face-to-face, web-based. 3 lecture hours.

**PHI 280: Caring in a Diverse Health Care 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 health care profession. The course examines dimensions of self-care to enhance preparation for a career in a health care 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 program courses with three semesters recommended. CROSS LISTED: NSG 280 and PST 280.

Mode of delivery: face-to-face, web-based, web-assisted. 3 lecture hours.

**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.

Mode of delivery: face-to-face; web-based. 3 lecture hours.

**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 health care. 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 health care 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.

**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.
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.

PST 111 Fundamentals of Polysomnographic Technology I (4 cr)
This course provides an introduction to polysomnographic therapy, including the history and overview of sleep medicine; sleep/wake physiology and pathophysiology; and polysomnographic procedures. COREQUISITE: PST 112 and PST 113. Mode of delivery: web-based. 4 lecture hours.

PST 112 Polysomnographic Instrumentation (4 cr)
Students will learn patient and equipment preparation procedure, proper methods for operating instruments utilized in polysomnographic therapy. They will be required to demonstrate an understanding of equipment electronics and related patient safety issues. COREQUISITE: PST 111 and PST 113. Mode of delivery: web-based. 4 lecture hours.

PST 113 Clinical Practicum I (2 cr)
This course will give students an initial hands-on experience in Polysomnographic Technology instrumentation including basic patient care and intake techniques and patient preparation for Polysomnographic testing. Students will also experience the function basic electrical components of Polysomnographic recording systems, artifact, filters, and troubleshooting. COREQUISITE: PST 111 and PST 112.
Mode of delivery: web-based. 6 clinical practicum hours.

PST 121 Fundamentals of Polysomnographic Technology II (4 cr)
Course content includes scoring of sleep stages, arousals, limb movements, disordered breathing events, and unusual or unexpected events, and comprehensive training in ECG rhythm patterns and arrhythmias. PREREQUISITE: BIO 180, MED 101, PST 111, PST 112 and PST 113; COREQUISITE: PST 122 and PST 123.
Mode of delivery: web-based. 4 lecture hours.

PST 122 Applied Polysomnographic Technology (4 cr)
Students will demonstrate an understanding of protocols for patient monitoring techniques, the criteria and procedures for therapeutic intervention, and age-appropriate patient communication. The course also introduces students to the practice of sleep therapy through clinical observation. PREREQUISITE: BIO 180, MED 101, PST 111, PST 112 and PST 113; COREQUISITE: PST 121 and PST 123.
Mode of delivery: web-based. 4 lecture hours.

PST 123 Clinical Practicum II (2 cr)
This course will focus on polysomnographic testing event recognition and management, therapeutic interventions, staging and scoring of polysomnographic testing and report generation for physician review. PREREQUISITE: BIO 180, MED 101, PST 111, PST 112 and PST 113; COREQUISITE: PST 121 and PST 122.
Mode of delivery: web-based. 6 clinical practicum hours.

PST 131 Clinical Practicum (8 cr)
The practicum will focus on patient chart review, patient assessment and orientation techniques, preparation and utilization of electrodes and monitors, preparation of the acquisition system, proper documentation, event recognition and management, therapeutic interventions, patient safety and emergency procedures, Multiple Sleep Latency Test and Maintenance of Wakefulness Test procedures, and scoring and report generation. PREREQUISITE: BIO 185, PHY 101, PST 121, PST 122 and 123; COREQUISITE: PST 132.
Mode of delivery: web-based. 24 clinical practicum hours.

PST 132 Professional Seminar (3 cr)
This course prepares the students for polysomnographic data analysis and reporting, case study analysis, advanced medical-legal issues, and the standards for continuing professional development. PREREQUISITE: BIO 185, PHY 101, PST 121, PST 122 and PST 123; COREQUISITE: PST 131.
Mode of delivery: web-based. 3 lecture hours.

PST 241 Advanced Polysomnography (3 cr)
Coursework emphasizes use of case studies with greater degree of difficulty that require advanced data interpretation and the study of the most advanced applicable treatments available. In conjunction with the liberal arts
and sciences courses required for the associate’s degree and relevant work experience, the ultimate purpose of the course is to prepare students for sleep therapy center management positions. PREREQUISITE: PST 131 and PST132. Mode of delivery: web-based. 3 lecture hours.

**PST 280: Caring in a Diverse Health Care 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 health care profession. The course examines dimensions of self-care to enhance preparation for a career in a health care 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 program courses with three semesters recommended. CROSS LISTED: NSG 280 and PHI 280. Mode of delivery: web-based. 3 lecture hours.

**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. 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.

**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. 3 lecture hours.

**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. PREREQUISITE: PSY101, SOC102. Mode of delivery: face-to-face. 3 lecture hours.

**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 Program; COREQUISITE: PTA 103. Mode of delivery: face-to-face. 1.5 lecture hours, 3 laboratory hours.

**PTA 103 PTA Clinical I (1 cr)**
This course is designed to introduce students to the clinical environment. Students will have the opportunity to interact with physical therapy staff and other health care professionals in order to increase their understanding of the physical therapy profession and delivery of health care. Students will incorporate Mercy’s core values into their
interactions with patients, families, and the health care team. These experiences occur off-campus.

PREREQUISITE: Admission to the PTA Program; COREQUISITE: PTA 101.
Mode of delivery: face-to-face. 3 clinical hours.

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. PREREQUISITE: BIO 180, MED 101, PTA 101, PTA 103; COREQUISITE: PTA 135. Mode of delivery: face-to-face. 2.5 lecture hours, 3 laboratory hours.

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. PREREQUISITE: BIO 180, ENG 101, MED 101, PTA 101, PTA 103, SPE 105; COREQUISITE: PTA 130. Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours.

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. PREREQUISITE: BIO 185, PTA 130, PTA 135; COREQUISITES: PTA 162, PTA 163, and PTA 165.
Mode of delivery: face-to-face. 2.5 lecture hours, 3 laboratory hours.

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. PREREQUISITE: PTA 130, PTA 135; COREQUISITES: PTA 160, PTA 163, and PTA 165.
Mode of delivery: face-to-face. 2 lecture hours, 4 laboratory hours.

PTA 163 PTA Clinical II (2 cr)
This course provides students with the opportunity to interact with physical therapy staff and other health care 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 into their interactions with patients, families, and the health care team. PREREQUISITE: PTA 130, PTA 135. COREQUISITES: PTA 160, PTA 162, PTA 165.
Mode of delivery: face-to-face. 6 clinical hours. (This clinical is 40 hours/week for 2 weeks.)

PTA 165 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.
PREREQUISITE: PSY 101, PTA 130, PTA 135. COREQUISITES: PTA 160, PTA 163, AND PTA 162.
Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours.

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. PREREQUISITE: BIO 302, PTA 160, PTA 162, PTA 163, PTA 165; COREQUISITES: PTA 202, PTA 204.
Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours.

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.

PREREQUISITE: BIO 302, PTA 160, PTA 162, PTA 163, PTA 165; COREQUISITES: PTA 201, PTA 204.

Mode of delivery: face-to-face. 2 lecture hours, 2 laboratory hours.

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.


Mode of delivery: face-to-face. 1 lecture hour.

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. PREQUISITE: PSY 202, PTA 204; COREQUISITE: PTA 232, PTA 234, PTA 235.

Mode of delivery: face-to-face. 1 lecture hour.

PTA 232 PTA Clinical III (5.5 cr)
This course provides students with the opportunity to interact with physical therapy staff and other health care 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 into their interactions with patients, families, and the health care team. This experience occurs off-campus. PREREQUISITE: PTA 201, PTA 202, PTA 204; COREQUISITE: PTA 230, PTA 234, and PTA 235.

Mode of delivery: face-to-face. 16.5 clinical hours.

PTA 234 PTA Clinical IV (5.5 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 into their interactions with patients, families, and the health care team. This experience occurs off-campus. PREREQUISITE: PTA 201, PTA 202, PTA 204; COREQUISITE: PTA 232, PTA 230, and PTA 235.

Mode of delivery: face-to-face. 16.5 clinical hours. (This clinical is 40 hours/week for 6 weeks)

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 IV. A formal paper and presentation to peers and faculty will follow. A mock licensure examination will also be administered. PREREQUISITE: PTA 201, PTA 202, PTA 204; COREQUISITE: PTA 230, PTA 232, and PTA 234.

Mode of delivery: face-to-face. 1 lecture hour.

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 health care 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: face-to-face. 2 lecture hours.

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.
Course Descriptions

**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: face-to-face. 2 lecture hours.

**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 health care 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 111, RAD 120.

Mode of delivery: face-to-face. 16 clinical practicum hours.

**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, leading to a broad based knowledge of imaging techniques. PREREQUISITES: RAD 101, RAD 104, RAD 110; COREQUISITES: RAD 111, RAD 120.

Mode of delivery: face-to-face. 2 lecture hours.

**RAD 116 Imaging Systems (3 cr)**
Through a variety of classroom activities, students will explore image processing, fluoroscopy, PACS, 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. PREREQUISITES: BIO 180, ENG 101, PHI 110, RAD 111, RAD 114, RAD 120; COREQUISITES: RAD 121, RAD 130.

Mode of delivery: face-to-face. 2 lecture hours.

**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: face-to-face. 1.5 lecture hours, 3 laboratory hours.

**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: BIO 180, ENG 101, PHI 110, RAD 111, RAD 114, RAD 120; COREQUISITES: RAD 116, RAD 130.

Mode of delivery: face-to-face. 16 clinical hours.

**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
Course Descriptions

researching special imaging procedures such as myelograms, arthrograms, and venograms. Imaging techniques
specific to the geriatric and pediatric patient will be presented. PREREQUISITES: BIO 180, ENG 101, PHI 110,
RAD 111, RAD 114, RAD 120; COREQUISITES: RAD 116, RAD 121.
Mode of delivery: face-to-face. 1 lecture hour, 2 laboratory hours.

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: BIO 185, PSY 101, SOC 102, SPE 105, RAD 116, RAD
121, RAD 130. Mode of delivery: face-to-face. 40 clinical internship hours.

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.
PREREQUISITES: RAD 131; COREQUISITES: RAD 203, RAD 205, RAD 210, RAD 211.
Mode of delivery: face-to-face. 3 lecture hours.

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. PREREQUISITES: RAD 131; COREQUISITES: RAD 202, RAD 205,
RAD 210, RAD 211. Mode of delivery: face-to-face. 2 lecture hours.

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 to operate radiographic equipment within safe limits. Through lectures and group activities, 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. PREREQUISITES: RAD 131;
COREQUISITES: RAD 202, RAD 203, RAD 210, RAD 211.
Mode of delivery: face-to-face, 3 lecture hours.

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. PREREQUISITES: RAD 131; COREQUISITES:
RAD 202, RAD 203, RAD 205, RAD 211.
Mode of delivery: face-to-face. 2 lecture hours.

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 program are in their second year of the program and will exhibit
increased independence in their clinical skills. PREREQUISITES: RAD 131; COREQUISITES: RAD 202, RAD
203, RAD 205, RAD 210.
Mode of delivery: face-to-face. 24 clinical practicum hours.

**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 program are expected to know, understand, and utilize radiation protection devices and procedures to protect themselves, the patient, and the health care team from unnecessary radiation exposure. PREREQUISITES: SLP 999, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211; COREQUISITES: RAD 220, RAD 221.
Mode of delivery: face-to-face. 3 lecture hours.

**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: SLP 999, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211; COREQUISITES: RAD 215, RAD 221.
Mode of delivery: face-to-face. 3 lecture hours.

**RAD 221 Clinical Practicum V (3 cr)**
Students at this level of the program are finishing their clinical competency requirements and preparing for graduation from the program. 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: SLP 999, RAD 202, RAD 203, RAD 205, RAD 210, RAD 211; COREQUISITES: RAD 215, RAD 220.
Mode of delivery: face-to-face. 3 lecture hours.

**RDG 095 College Preparatory Reading (3cr)**
This course is designed to help students succeed with college-level reading assignments. Emphasis will be placed on vocabulary development, basic comprehension abilities, and effective reading strategies. In particular, students will develop fundamental, critical reading skills which will empower them to recognize the main idea and distinguish supporting details in written works.
Mode of delivery: face-to-face. 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-assisted. 3 lecture hours.

**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. PREREQUISITES: SOC 102.
Mode of delivery: face-to-face. 3 lecture hours.

**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, health care, globalization, discrimination, and the
SPA 101 Spanish I (3 cr)
Principles, vocabulary, and the essentials of grammatical structures with an emphasis on aural-oral practice in the learning of spoken Spanish.
Mode of delivery: face-to-face; web-assisted. 3 lecture hours.

SPA 102 Spanish II (3 cr)
Continuation of 101 with increased emphasis on spoken Spanish. PREREQUISITE: SPA 101.
Mode of delivery: face-to-face. 3 lecture hours.

SPE 105 Small Group Communication (1 cr)
An introduction to group formation and processes, including strategies of interaction and the individual as an effective participant/leader in task-oriented groups.
Mode of delivery: face-to-face. 1 lecture hour.

STA 330 Biostatistics (3 cr)
This course emphasizes the fundamental principles and methods of statistical analyses for health sciences. 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 tests. PREREQUISITE: MAT 120 or college level math course.
Mode of delivery: face-to-face; web-based. 3 lecture hours.

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 330.
Mode of delivery: face-to-face; web-based. 3 lecture hours.

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: STA 420. Mode of delivery: web-based. 3 lecture hours.

SUR 101 Introduction to Surgical Technology (4 cr)
This course offers the foundational theories and techniques of surgery. Within this course legal concepts, risk management, and ethical issues are analyzed. Discussions about the surgical patient, special populations that require surgical intervention, the physical environment, safety standards, and surgical case management are also examined. COREQUISITES: BIO 180, SUR 109. Mode of delivery: Face-to-face/web-based. 4 lecture hours.

SUR 109 Principles and Practice of Surgical Technology (7 cr)
This course introduces basic concepts needed to function within the operating room environment. It offers instruction on biomedical science, preventing perioperative disease transmission, hemostasis, emergency situations, and all-hazards preparation. Further emphasis is placed on surgical instrumentation, equipment, supplies, wound healing, sutures, needles, and surgical case management. The lab portion of this course provides students hands-on learning and the opportunity to apply the foundational knowledge needed to provide optimal patient care in a surgical setting. COREQUISITES: BIO 180, SUR 101 Mode of delivery: face-to-face. 4 lecture hours and 6 lab hours.

SUR 131 Surgical Techniques/Procedures (6 cr)
This course is designed to allow students to correlate relevant surgical anatomy, physiology, and pathophysiology to surgical procedures. Diagnostic interventions, pre-op, intra-op, and post-op factors unique to surgical specialties will also be discussed. PREREQUISITES: BIO 180, SUR 101, SUR 109, COREQUISITE: SUR 132, SUR 140. Mode of delivery: Web-Assisted. 6 lecture hours.
SUR 132 Clinical I (6 cr)
This course emphasizes hands-on application of relevant surgical anatomy, physiology, pathophysiology, diagnostic interventions, and factors unique to the pre-op, intra-op, and post-op surgical environment. Students will incorporate the core values of Mercy into their interactions with patients, families, and the surgical team at various healthcare facilities. PREREQUISITES: BIO 180, SUR 101, SUR 109, COREQUISITE: SUR 131, SUR 140. Mode of delivery: face-to-face. 360 clinical hours (This clinical is 24 hours/week for 15 weeks).

SUR 140 Pharmacology for Surgical Technologists (2 cr)
This course will enhance fundamental math skills and provide a summary of basic pharmacology, drug regulation and drug administration. Drugs frequently used in the surgical setting will be examined along with an overview of anesthesia administration and general practice. PREREQUISITES: BIO 180, SUR 101, SUR 109, COREQUISITE: SUR 131, SUR 132. Mode of delivery: face-to-face. 2 lecture hours.

SUR 162 Clinical II/Preceptorship (6 cr)
This course emphasizes a preceptorship with hands-on application of relevant surgical anatomy, physiology, pathophysiology, diagnostic interventions, and factors unique to the pre-op, intra-op, and post-op surgical environment. Students will incorporate the core values of Mercy into their interactions with patients, families, and the surgical team at various healthcare facilities. PREREQUISITES: BIO 180, SUR 101, SUR 109, SUR 131, SUR 132, SUR 140; COREQUISITE: SUR 163. Mode of delivery: 240 clinical hours (This clinical is 24 hours/week for 10 weeks.

SUR 163 Professionalism for Surgical Technologist (2 cr)
This course is designed to prepare students for the NBSTSA (National Board of Surgical Technologist and Surgical Assisting) certification exam, interview processes, resume writing, various employment opportunities in surgical technology. AST membership and continuing education requirements as well as legal issues relating to surgical technologist will also be examined. PREREQUISITES: BIO 180, SUR 101, SUR 109, SUR 131, SUR 132, SUR 140. COREQUISITE: BIO 203, PHI 110, SUR 162 Mode of delivery: face-to-face 3 lecture hours.

SUR 201 Perioperative Professional Issues (2 cr)
This course is designed for the student pursuing the associate of science in surgical technology degree. A seminar approach is used to explore ethical and professional issues impacting the surgical technologist in the care of the surgical patient. PREREQUISITES: BIO 180, BIO 203, PHI 110, SUR 101, SUR 109, SUR 131, SUR 132, SUR 140, SUR 162, SUR 163. Mode of delivery: Web-based, 2 lecture hours.

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. (Prerequisite: None) Mode of delivery: face-to-face, web-assisted, or web-based.

THE 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. 3 lecture hours.

THE 320 New Testament Analysis (3 cr)
This course is an intensive analysis and discussion of the New Testament. In addition to understanding the theological significance of each New Testament book with respect to standard methodology of biblical interpretation, students will engage in an in-depth examination of the caring and curative ministry of Jesus Christ as recorded in selected Gospel accounts and explore those aspects which are relevant to their lives and practice as
effective healthcare professionals.
Mode of delivery: face-to-face. 3 lecture hours.

THE 334 Comparative World Religions (3 cr)
This course is an in-depth exploration and critical analysis of the major world religions whereby students will be able to compare and contrast the systematic integrity of the various religions, along with their impact on humankind with special attention given to aspects relevant for providing caring/competent healthcare to those from diverse religious backgrounds.
Mode of delivery: face-to-face; web-based. 3 lecture hours.
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